=> fil reg

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STRUCTURE FILE UPDATES: 20 JAN 2003 HIGHEST RN 479577-81-6 DICTIONARY FILE UPDATES: 20 JAN 2003 HIGHEST RN 479577-81-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d sta que 117 L14 STR

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VAR G2=AK/16
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 10
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L16 2264 SEA FILE=REGISTRY SSS FUL L14

L17 629 SEA FILE=REGISTRY SUB=L16 CSS FUL L14

100.0% PROCESSED 2264 ITERATIONS SEARCH TIME: 00.00.01

629 ANSWERS

=> d his

L1

L2

(FILE 'HOME' ENTERED AT 15:52:25 ON 21 JAN 2003) SET COST OFF

FILE 'REGISTRY' ENTERED AT 15:52:46 ON 21 JAN 2003

2 S HYALURONIC ACID/CN OR 9067-32-7

753 S ?HYALURON?/CNS NOT L1

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

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L3
              435 S L2 NOT SQL/FA
 L4
              318 S L2 NOT L3
                  E CYCLOOXYGENASE/CN
 L5
                1 S E8
 L6
               2 S E3, E7
                  E MATRIX METALLOPROTEASE/CN
 L7
               15 S E3, E5-E13, E15-E17, E23, E24
                5 S E25, E36, E43, E45, E46
 rs
                4 S E50, E51, E55, E58
 L9
 L10
                1 S E61
 L11
                5 S E72, E75, E79-E81
 L12
                4 S E85, E89-E91
            1365 S (?METALLOPROTEINASE? OR ?METALLOPROTEASE?)/CNS
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 L14
                 STR
 L15
              31 S L14 CSS
            2264 S L14 FUL
 L16
                  SAV TEMP L16 FONDA700/A
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 L19
            3440 S L3
 L20
             151 S L4
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 L21
 L22
           20161 S ?HYALURON?
L23
           20696 S L18-L22
L24
            1922 S L5
L25
            9113 S L6
           13384 S (COX OR CYCLOOXYGENASE OR CYCLO OXYGENASE) (L) 2 OR COX2
L26
              13 S PROSTAGLANDIN(L) (ENDOPEROXIDASE OR ENDO PEROXIDASE)(L) (SYNTHA
L27
              41 S L23 AND L24-L27
L28
           26594 S L7-L13
L29
             476 S L23 AND L29
L30
             309 S <u>L17</u>
<u>L31</u>
L32
               4 S L23 AND L31
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L35
              45 S L28, L32, L34
                 E ANTIRHEUMAT/CT
                 E E5+ALL
            4437 S E5, E4+NT
L36
             48 S L23 AND L36
L38
              91 S L35, L37
             77 S L23 AND (ANTIRHEUMAT? OR ANTI RHEUMAT?)
L39
L40
            136 S L38, L39
L41
               6 S L40 AND ?CONJUGAT?
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L42
            596 S E3-E5
                 E TAMURA TATSUYA/AU
L43
              57 S E3
                E OKAMACHI A/AU
L44
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          15106 S E1-E6
                E KABUSHIKI/PA,CS
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 L51
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                  E JP98-138329/AP, PRN
                1 S E4
 L52
                  E JP98-224187/AP, PRN
                1 S E4
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                  E JP99-43064/AP, PRN
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               8 S L60 AND L42-L49
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                 SEL DN AN 1-3
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               4 S L50, L56, L62 AND L18-L32, L34-L56, L58-L62
L63
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L65
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               4 S L56, L63
                 E JOINT/CT
                 E E5+ALL
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            1229 S E2
                 E JOINT/CT
L68
            3685 S E7-E28
                 E E6+ALL
L69
            8769 S E6, E5+NT
                 E E13+ALL
            2565 S E2
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L71
              25 S L65 AND L67-L70
                 E CARTILAGE/CT
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              13 S L65 AND E4-E20
                 E E3+ALL
L73
              38 S L65 AND E7+NT
                E RHEUMATISM/CT
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L81
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             84 S L79, L81
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L84
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L85
             21 S L83 AND L58, L59
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L86
              2 S E1-E6
L87
             27 S L83 NOT L84, L85, L86, L66
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L90
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L98
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L100
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L105
             12 S L99,L104 AND L18-L32,L34-L56,L58-104
                SEL HIT RN
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FILE 'REGISTRY' ENTERED AT 17:12:01 ON 21 JAN 2003 L107 36 S E44-E79 L108 23 S L107 NOT L106 L109 1 S L108 AND C39H59N5O11

FILE 'REGISTRY' ENTERED AT 17:13:39 ON 21 JAN 2003

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 17:13:54 ON 21 JAN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 21 Jan 2003 VOL 138 ISS 4 FILE LAST UPDATED: 20 Jan 2003 (20030120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

K

## => d l111 all hitstr tot

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L111 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2003 ACS
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AN 2002:504633 HCAPLUS

DN 137:52423

TI Drugs against articular failure containing amino sugars and trehalose

IN Fukuda, Shigeharu; Ario, Takeshi; Miyake, Toshio

PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan

SO PCT Int. Appl., 30 pp. CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K031-7008

ICS A61K031-727; A61K031-728; A61K031-7016; A61P019-02; A61P029-00; A61K031-7008; A61K031-7016; A61K031-726; A61K031-7016; A61K031-727; A61K031-7016; A61K031-728; A61K031-7016

CC **63-6** (Pharmaceuticals)

Section cross-reference(s): 1, 18, 62

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002051424 A1 20020704 WO 2001-JP11147 20011219
WO 2002051424 C1 20020801

W: KR, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

JP 2002193811 A2 20020710 JP 2000-391390 20001222

PRAI JP 2000-391390 A 20001222

AB It is intended to provide compns. which exert an effect of restoring articular failure at a level superior to aminosugars and glycosaminoglycan. This problem is solved by providing drugs against articular failure which contain as the active ingredients an aminosugar and trehalose. The compns. contg. aminosugar and trehalose are suitable for use in oral pharmaceutical compns., cosmetics, and foods. A powder compn. contg. trehalose (Treha) 4, glucosamine 1 parts was prepd. for use in a pharmaceutical, cosmetic, or food compn.

ST aminosugar trehalose articular disorder treatment

IT Carbohydrates, biological studies

RL: COS (Cosmetic use); FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (amino sugars; compns. contg. amino sugars and trehalose for treatment of articular disorder)

IT Antiarthritics

## Antirheumatic agents

## Arthritis

Bath preparations

Chewing gum

Cosmetics

Food

## Rheumatic diseases

(compns. contg. amino sugars and trehalose for treatment of articular disorder)

IT Glycosaminoglycans, biological studies

RL: COS (Cosmetic use); FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. contg. amino sugars, trehalose, and glycosaminoglycans for treatment of articular disorder)

IT Joint, anatomical

(disease; compns. contg. amino sugars and trehalose for treatment of articular disorder)

IT Beverages

(health; compns. contg. amino sugars and trehalose for treatment of

articular disorder) TΨ Drug delivery systems (oral; compns. contg. amino sugars and trehalose for treatment of articular disorder) IT 99-20-7, Trehalose 3416-24-8, Glucosamine 7512-17-6, N-Acetyl 14307-02-9, Mannosamine glucosamine RL: COS (Cosmetic use); FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. contg. amino sugars and trehalose for treatment of articular disorder) IT 9004-61-9, Hyaluronic acid 9005-49-6, Heparin, biological studies 9007-27-6, Chondroitin 9007-28-7, Chondroitin sulfate 9050-30-0, Heparan sulfate 9056-36-4, Keratan 24967-93-9, Chondroitin 4-sulfate 24967-94-0, Dermatan sulfate RL: COS (Cosmetic use); FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. contg. amino sugars, trehalose, and glycosaminoglycans for treatment of articular disorder) THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT (1) K K Hayashibara Seibutsu Kagaku Kenkyujo; JP 2000198736 A 2000 HCAPLUS (2) Nutramax Lab Inc; EP 0693928 A 1994 HCAPLUS (3) Nutramax Lab Inc; JP 09503197 A 1994 (4) Nutramax Lab Inc; ES 2099686 T 1994 (5) Nutramax Lab Inc; CA 2159591 A 1994 HCAPLUS (6) Nutramax Lab Inc; NZ 263710 A 1994 (7) Nutramax Lab Inc; AU 6490194 A 1994 (8) Nutramax Lab Inc; AU 688313 A 1994 HCAPLUS (9) Nutramax Lab Inc; DE 693928 T 1994 (10) Nutramax Lab Inc; BR 9406178 A 1994 HCAPLUS (11) Nutramax Lab Inc; WO 9422453 A 1994 HCAPLUS (12) Nutramax Lab Inc; FI 954654 A 1994 (13) Sunstar Inc; JP 200172582 A 2001 (14) Takeda Chemical Industries Ltd; JP 2001302496 A 2001 HCAPLUS 9004-61-9, Hyaluronic acid RL: COS (Cosmetic use); FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. contg. amino sugars, trehalose, and glycosaminoglycans for treatment of articular disorder) RN 9004-61-9 HCAPLUS CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME) \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* L111 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2003 ACS 2002:428944 HCAPLUS ΑN DN 137:24315 Compound of hydroxamic acid derivative and hyaluronic ΤI acid for treatment of joint disease ΙN Ikeya, Hitoshi; Morikawa, Tadashi; Takahashi, Koichi; Okamachi, Akira; Tamura, Tatsuya PA Chugai Seiyaku Kabushiki Kaisha, Japan; Denki Kagaku Kogyo **Kabushiki Kaisha** SO PCT Int. Appl., 39 pp. CODEN: PIXXD2 DTPatent LA Japanese IC ICM C08B037-08

A61K031-728; A61P019-02; A61P029-00.

63-6 (Pharmaceuticals)

Section cross-reference(s): 1

CC

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FAN.CNT 1
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
                                                             DATE
PΙ
     WO 2002044218
                       A1
                            (20020606)
                                            WO 2001-JP10493
                                                             20011130
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             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
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                            20020611
                                           AU 2002-18512
                                                             20011130
PRAI JP 2000-363993
                       Α
                            20001130
     WO 2001-JP10493
                       W
                            20011130
OS
     MARPAT 137:24315
GΙ
```

Disclosed is a compd. having MMP inhibitory activity which is a compd. of a hydroxamic acid deriv. I and hyaluronic acid, wherein R1 = H, OH, C1-8 alkyl, etc.; R2 = C1-8 alkyl, etc.; R3 = C1-8 alkyl, etc.; R4 = H, C1-4 alkyl; R5 = -R7-R8-R9- (R7 = C1-8 alkylene, R8 = methylene, imino, O, etc., and R9 = C1-10 alkylene, etc.); and R6 = H, C1-4 alkyl, provided that R1 and R3 in combination may form a ring. The compd. comprises a group I and any of hyaluronic acid, a deriv. thereof, and salts of these, the former being bonded to a hydroxyl group of the latter through a carbamate linkage. Sodium hyaluronate was reacted with N-hydroxy-5-norbornene-2,3-dicarboxyimide (HONB) and hydroxamic acid deriv. N'-(13-amino-4,7,10-trioxatridecanyl)-N-(3S-hydroxy-4-(N-(1-methoxy-1-methylethoxy)amino)-2R-isobutylsuccinyl)-L-tert-leucinamide. The obtained compd. showed excellent inhibitory effect on gelatinase A and stromelysin-1 in in vitro

ST hyaluronate hydroxamate deriv prepn matrix metalloproteinase inhibitor

IT Joint, anatomical

(disease; hyaluronic acid hydroxamate derivs. for treatment of joint disease)

IT Antiarthritics

Antirheumatic agents

(hyaluronic acid hydroxamate derivs. for treatment of joint disease)

IT Collagens, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (hyaluronic acid hydroxamate derivs. for treatment of joint disease)

434283-17-7DP, compexes with hyaluronic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

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(hyaluronic acid hydroxamate derivs. for treatment
         of joint disease)
      434283-18-8D, reaction products with hyaluronate derivs.
 IT
      434283-19-9D, reaction products with hyaluronate derivs.
      434283-20-2D, reaction products with hyaluronate derivs.
      434283-21-3D, reaction products with hyaluronate derivs.
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (hyaluronic acid hydroxamate derivs. for treatment
         of joint disease)
      79955-99-0, Stromelysin-1 141907-41-7, Matrix
 IT
     metalloproteinase 146480-35-5, Gelatinase A
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibition of; hyaluronic acid hydroxamate derivs.
        for treatment of joint disease)
     116-11-0 5470-11-1, Hydroxyammonium chloride 9067-32-7, Sodium
ΙT
     hyaluronate
                  21715-90-2, HOND
                                     62965-35-9, N-(tert-
     Butoxycarbonyl)-L-tert-leucine
                                      157518-70-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (prepn. of hyaluronic acid hydroxamate derivs. for
        treatment of joint disease)
     433708-29-3P
IT
                    433708-31-7P
                                   433708-33-9P
                                                   433708-35-1P
     433708-37-3P
                    433708-39-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. of hyaluronic acid hydroxamate derivs. for
        treatment of joint disease)
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Chugai Pharmaceutical Co Ltd; EP 1082963 A 1999 HCAPLUS
(2) Chugai Pharmaceutical Co Ltd; WO 9959603 A 1999 HCAPLUS
(3) Shionogi & Co Ltd; WO 0046189 A 2000 HCAPLUS
     434283-17-7DP, compexes with hyaluronic acid
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (hyaluronic acid hydroxamate derivs. for treatment
        of joint disease)
     434283-17-7 HCAPLUS
RN
     Carbamic acid, [3-[(18S,21R)-18-(1,1-dimethylethyl)-21-[(1S)-1-hydroxy-2-
CN
     (hydroxyamino) -2-oxoethyl] -23-methyl-1,17,20-trioxo-6,9,12-trioxa-2,16,19-
     triazatetracos-1-yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI) (CA INDEX NAME)
```

PAGE 1-B

PAGE 1-B

RN 434283-19-9 HCAPLUS

CN Carbamic acid, [3-[17-[(6S,7R,10S)-6-[(hydroxyamino)carbonyl]-7-(2-methylpropyl)-8-oxo-2-oxa-9-azabicyclo[10.2.2]hexadeca-12,14,15-trien-10-yl]-1,17-dioxo-6,9,12-trioxa-2,16-diazaheptadec-1-yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 434283-20-2 HCAPLUS

CN Carbamic acid, [3-[(18S,21R)-18-(1,1-dimethylethyl)-21-[2-(hydroxyamino)-2-oxoethyl]-23-methyl-1,17,20-trioxo-6,9,12-trioxa-2,16,19-triazatetracos-1-yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 434283-21-3 HCAPLUS

CN Carbamic acid, [3-[(18S,21R)-18-(1,1-dimethylethyl)-21-[(1S)-2-(hydroxyamino)-1-methyl-2-oxoethyl]-23-methyl-1,17,20-trioxo-6,9,12-trioxa-2,16,19-triazatetracos-1-yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

IT 79955-99-0, Stromelysin-1 141907-41-7, Matrix

```
metalloproteinase 146480-35-5, Gelatinase A
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibition of; hyaluronic acid hydroxamate derivs.
         for treatment of joint disease)
 RN
     79955-99-0 HCAPLUS
 CN
     Stromelysin 1 (9CI)
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     141907-41-7 HCAPLUS
     Proteinase, matrix metallo- (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     146480-35-5 HCAPLUS
     Gelatinase A (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9067-32-7, Sodium hyaluronate
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of hyaluronic acid hydroxamate derivs. for
        treatment of joint disease)
RN
     9067-32-7 HCAPLUS
     Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
ΙT
     433708-37-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. of hyaluronic acid hydroxamate derivs. for
        treatment of joint disease)
RN
     433708-37-3 HCAPLUS
     6,9,12-Trioxa-2,16,19-triazatetracosanoic acid, 18-(1,1-dimethylethyl)-21-
CN
     [(1S)-1-hydroxy-2-(hydroxyamino)-2-oxoethyl]-23-methyl-17,20-dioxo-,
    phenylmethyl ester, (18S,21R) - (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

PAGE 1-B

X

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ΑN
      2000:880946 HCAPLUS
 DN
      134:25362
      Use of catechins for arthritis treatment, compositions, and
 TI
      screening method
 IN
      Buttle, David; Adcocks, Clair; Collin, Peter
 PA
      University of Sheffield, UK
 SO
      PCT Int. Appl., 40 pp.
      CODEN: PIXXD2
 DT
      Patent
 LA
      English
 IC
      ICM A61K031-00
      1-7 (Pharmacology)
 FAN.CNT 2
      PATENT NO.
                       KIND
                             DATE
                                             APPLICATION NO.
                                                               DATE
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                                             -----
 PI
      WO 2000074662
                        A2
                              20001214
                                             WO 2000-GB2048
                                                              20000606
      WO 2000074662
                        A3
                             20020314
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
              CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
              ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
              LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
              SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
              CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1207862
                        A2
                            20020529
                                            EP 2000-935346
                                                             20000606
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003501381
                        T2 · 20030114
                                            JP 2001-501199
                                                              20000606
PRAI US 1999-137699P
                            19990607
                        Р
     GB 2000-7321
                        Α
     WO 2000-GB2048
                        W
                             20000606
     The invention relates to the use of catechins in the treatment of various
AB
     forms of arthritis, including the use of combinations of
     catechins and other anti-arthritic agents in the treatment; medicaments
     and compns. for use in the treatment; and methods to identify
     agents with anti-arthritic properties.
ST
     screening arthritis inhibitor catechin
     Blood cell
         (TNF-.alpha. synthesis in; catechins for arthritis treatment,
        compns., and screening method)
IΤ
     Arthritis
        (acute pyrophosphate; catechins for arthritis treatment, compns
        ., and screening method)
IT
     Flavanols
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (and catechin-hyaluronic acid conjugates;
        catechins for arthritis treatment, compns., and screening
        method)
ΙT
     Spinal column
        (ankylosing spondylitis; catechins for arthritis treatment,
        compns., and screening method)
IT
     Joint, anatomical
        (bursa, bursitis; catechins for arthritis treatment,
        compns., and screening method)
IT
     Musculoskeletal diseases
        (cartilage, chondrolysis; catechins for arthritis treatment,
        compns., and screening method)
IT
     Antiarthritics
       Antirheumatic agents
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Cartilage
      Drug screening
        Gout
      Lupus erythematosus
        Sjogren's syndrome
         (catechins for arthritis treatment, compns., and screening
         method)
 IT
      Biopolymers
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
         (catechins for arthritis treatment, compns., and screening
         method)
 TΤ
      Proteoglycans, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (catechins for arthritis treatment, compns., and screening
        method)
IT
     Interleukin 1.alpha.
     Interleukin 1.beta.
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (catechins for arthritis treatment, compns., and screening
        method)
IT
     Cartilage
         (disease, chondrolysis; catechins for arthritis treatment,
        compns., and screening method)
TT
     Immune system
         (immune-silent compn.; catechins for arthritis treatment,
        compns., and screening method)
ΙT
     Chondrocyte
        (lactate output; catechins for arthritis treatment, compns.,
        and screening method)
ΙT
     Bone, disease
       Cartilage
        (osteochondritis, and relapsing polychondritis; catechins for
        arthritis treatment, compns., and screening method)
ΙT
     Cytokines
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (pro-inflammatory; catechins for arthritis treatment, compns
        ., and screening method)
IT
     Arthritis
        (pseudogout; catechins for arthritis treatment, compns., and
        screening method)
TΤ
     Arthritis
        (reactive, and psoriatic and juvenile; catechins for
        arthritis treatment, compns., and screening method)
     Glycosaminoglycans, biological studies
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (sulfated; catechins for arthritis treatment, compns., and
        screening method)
IT
    Collagens, biological studies
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (type II; catechins for arthritis treatment, compns., and
        screening method)
IΤ
    Tumor necrosis factors
    RL: BPR (Biological process); BSU (Biological study, unclassified); THU
     (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (.alpha.; catechins for arthritis treatment, compns., and
        screening method)
IT
    154-23-4, (+)-Catechin
                              154-23-4D, (+)-Catechin, hyaluronic
    acid conjugates
                      490-46-0, (-)-Epicatechin
                                                   490-46-0D,
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(-)-Epicatechin, hyaluronic acid conjugates
      970-74-1, (-)-Epigallocatechin 970-74-1D, (-)-Epigallocatechin,
      hyaluronic acid conjugates
                                    989-51-5,
       (-)-Epigallocatechin gallate
                                     989-51-5D, (-)-Epigallocatechin gallate,
      hyaluronic acid conjugates
                                    1257-08-5
      1257-08-5D, hyaluronic acid conjugates
      3371-27-5, (-)-Gallocatechin
                                     3371-27-5D, (-)-Gallocatechin,
      hyaluronic acid conjugates
                                   3416-24-8,
                    4233-96-9, (-)-Gallocatechin gallate
      Glucosamine
                                                            4233-96-9D,
      (-)-Gallocatechin gallate, hyaluronic acid
      conjugates 9004-61-9, Hyaluronic acid
      9004-61-9D, Hyaluronic acid,
      conjugates with catechins
                                  18829-70-4, (-)-Catechin
      18829-70-4D, (-)-Catechin, hyaluronic acid
      conjugates
                   29031-19-4, Glucosamine sulfate
                                                     35323-91-2,
                        35323-91-2D, (+)-Epicatechin, hyaluronic
      (+)-Epicatechin
      acid conjugates
                        130405-40-2, (-)-Catechin gallate
      130405-40-2D, (-)-Catechin gallate, hyaluronic acid
      conjugates
      RL: BAC (Biological activity or effector, except adverse); BSU
      (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (catechins for arthritis treatment, compns., and screening
         method)
      302-79-4, all-trans-Retinoic acid
 IT
                                         11103-57-4D, Vitamin A, metabolites
      106956-32-5, Oncostatin M
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (catechins for arthritis treatment, compns., and screening
        method)
 TΤ
     50-21-5, Lactic acid, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (chondrocyte lactate output; catechins for arthritis treatment,
        compns., and screening method)
     9004-61-9, Hyaluronic acid 9004-61-9D
IT
      , Hyaluronic acid, conjugates with catechins
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (catechins for arthritis treatment, compns., and screening
        method)
     9004-61-9 HCAPLUS
RN
     Hyaluronic acid (8CI, 9CI)
CN
                                (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI)
                                 (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L111 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ΑN
     2000:645863 HCAPLUS
DN
     133:217693
ΤI
     Remedies for joint diseases
     Serizawa, Isao; Maekawa, Keisei; Illes, Janos; Neszmeli, Erzsebet
ΙN
     Takata Seiyaku Co., Ltd., Japan; Richter Gedeon Vegyeszeti Gyar
PA
     Rt.
SO
     PCT Int. Appl., 24 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    Japanese
IC
     ICM A61K033-30
         A61P019-02; A61P029-00; A61P035-04
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CC
      1-7 (Pharmacology)
      Section cross-reference(s): 63
 FAN.CNT 1
      PATENT NO.
                       KIND DATE
                                            APPLICATION NO.
                                                             DATE
                              A----
                                            ______
                             $0000914)
 PΤ
      WO 2000053194
                       A1
                                          WO 2000-JP1487
                                                             20000310
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
              CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
              IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
              MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
              SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
              DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      EP 1166788
                       A1
                            20020102
                                          EP 2000-908017
                                                             20000310
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI JP 1999-63718
                       Α
                             19990310
     WO 2000-JP1487
                       W
                             20000310
     Remedies for joint diseases such as rheumatoid arthritis contain as the
AΒ
     active ingredient a complex (assoc.) of hyaluronic acid
     with zinc. Compared with hyaluronic acid and zinc
     (i.e., constituents thereof), this complex synergistically inhibits the
     proliferation of synovial cells and thus regulates the prodn. of a
     histoclastic enzyme MMP-9 produced by synovial cells.
ST
     antirheumatic zinc hyaluronate MMP 9 inhibitor
     Eye, disease
        (diabetic retinopathy; zinc hyaluronate as MMP 9 regulator
        for treatment of diabetic retinopathy)
ΙT
     Joint, anatomical
        (disease; zinc hyaluronate for treatment of joint
        diseases)
ΙT
     Drug delivery systems
        (injections; zinc hyaluronate for treatment of joint
        diseases)
IT
     Antitumor agents
        (metastasis; zinc hyaluronate as MMP 9 regulator as
        antimetastatic agent)
TΤ
     Antirheumatic agents
        (zinc hyaluronate for treatment of joint diseases)
     146480-36-6, Matrix metalloproteinase 9
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (inhibition in; zinc hyaluronate for treatment of joint
        diseases)
ΙT
     177402-92-5, Zinc hyaluronate
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (zinc hyaluronate for treatment of joint diseases)
        28
              THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Arthropharm Pty Limited; JP 02502547 A
(2) Arthropharm Pty Limited; CA 1327354 A HCAPLUS
(3) Arthropharm Pty Limited; AU 1545688 A
(4) Arthropharm Pty Limited; EP 356435 A1 HCAPLUS
(5) Arthropharm Pty Limited; DE 3854604 A
(6) Arthropharm Pty Limited; US 5470840 A HCAPLUS
(7) Arthropharm Pty Limited; US 5668116 A HCAPLUS
(8) Arthropharm Pty Limited; WO 8807060 A1 1988 HCAPLUS
(9) Chemical Works Of Gedeon Richter Ltd; JP 03505231 A
(10) Chemical Works Of Gedeon Richter Ltd; CN 1045394 A HCAPLUS
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(11) Chemical Works Of Gedeon Richter Ltd; DD 292263 A HCAPLUS
 (12) Chemical Works Of Gedeon Richter Ltd; EP 413016 A1 HCAPLUS
 (13) Chemical Works Of Gedeon Richter Ltd; AU 5108890 A
 (14) Chemical Works Of Gedeon Richter Ltd; HU 53128 A HCAPLUS
 (15) Chemical Works Of Gedeon Richter Ltd; US 5472950 A HCAPLUS
 (16) Chemical Works Of Gedeon Richter Ltd; ZA 9001357 A HCAPLUS
 (17) Chemical Works Of Gedeon Richter Ltd; GR 90100137 A
 (18) Chemical Works Of Gedeon Richter Ltd; NO 904584 A
 (19) Chemical Works Of Gedeon Richter Ltd; FI 905109 A
 (20) Chemical Works Of Gedeon Richter Ltd; IL 93489 A HCAPLUS
 (21) Chemical Works Of Gedeon Richter Ltd; KR 9615624 B
 (22) Chemical Works Of Gedeon Richter Ltd; WO 9010020 A1 1990 HCAPLUS
 (23) Fidia Advanced Biopolymers S R L; JP 11504668 A
 (24) Fidia Advanced Biopolymers S R L; AU 695512 B HCAPLUS
 (25) Fidia Advanced Biopolymers S R L; DE 69603721 A
 (26) Fidia Advanced Biopolymers S R L; EP 827514 A HCAPLUS
(27) Fidia Advanced Biopolymers S R L; IT 95560090 A
(28) Fidia Advanced Biopolymers S R L; WO 9635720 A1 1996 HCAPLUS
     146480-36-6, Matrix metalloproteinase 9
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (inhibition in; zinc hyaluronate for treatment of joint
        diseases)
RN
     146480-36-6 HCAPLUS
CN
     Gelatinase B (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     177402-92-5, Zinc hyaluronate
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (zinc hyaluronate for treatment of joint diseases)
RN
     177402-92-5 HCAPLUS
CN
     Hyaluronic acid, zinc salt (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L111 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2003 ACS
AN
     2000:470317 HCAPLUS
DN
     133:94604
ΤI
     Use of polymers as microspheres for wound healing
IN
     Ritter, Vladimir; Ritter, Marina
     Polyheal Ltd., Israel
PA
SO
     U.S., 45 pp., 5861149Cont.-in-part of U.S. 5,861,149.
     CODEN: USXXAM
DT
     Patent
LA
     English
IC
     ICM A61K031-74
NCL 424078060
CC
     63-7 (Pharmaceuticals)
FAN.CNT 2
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
                     ____
PI
     US 6086863
                      A
                            20000711
                                           US 1998-177954
                                                            19981023
US 5861149 A
PRAI US 1997-868950 A2
     US 5861149
                            19990119
                                           US 1997-868950
                                                            19970604
                            19970604
     Therapeutic compns. of microspheres for application to wounds
     and/or lesions for accelerating wound healing and muscle regeneration are
     disclosed. The microspheres are made up of non-biodegradable material
     having a substantial surface charge. The therapeutic compn.
     further includes a pharmaceutically acceptable carrier in which the
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microspheres are insol. and a container for holding the compn. The therapeutic compn. further contains pharmacol. agents or

ST

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TT

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biologics that accelerate the wound healing process. Microspheres were made of polystyrene, either with carboxyl or amino surface groups or without addnl. surface groups were prepd. The diams. of the microspheres ranged from about 0.1 to about 20 .mu.m. The zeta potential of certain microspheres was also tested and demonstrated that the size of the sphere and the type of surface groups clearly had an effect on the amt. of overall charge carried by each microsphere, which could have important effect on the ability of the microsphere to promote wound healing. Effects of microspheres on collagen synthesis and deposition and on wound healing in humans was shown. wound healing polymer microsphere polystyrene Platelet-derived growth factors RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (angiogenesis; use of polymers as microspheres for wound healing) Skin preparations (pharmaceutical) (astringents; use of polymers as microspheres for wound healing) Bone, disease (fracture; use of polymers as microspheres for wound healing) Cytokines RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (macrophage-activating factor; use of polymers as microspheres for wound healing) Drug delivery systems (microspheres; use of polymers as microspheres for wound healing) Drug delivery systems (ointments; use of polymers as microspheres for wound healing) Ulcer (stasis; use of polymers as microspheres for wound healing) Bone marrow (stroma; use of polymers as microspheres for wound healing) (surgical; use of polymers as microspheres for wound healing) Analgesics Anesthetics Antibiotics Antihistamines Antitumor agents Antiviral agents Cations Fungicides Immunostimulants Pain Solvents Wound healing (use of polymers as microspheres for wound healing) Amino acids, biological studies Collagens, biological studies Growth factors, animal Platelet-derived growth factors Polymers, biological studies Polysiloxanes, biological studies Vitamins RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (use of polymers as microspheres for wound healing)

ITTransforming growth factors RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(.beta.-; use of polymers as microspheres for wound healing)

IT 39391-18-9

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (cyclooxygenase-2, inhibitors; use of polymers as microspheres for wound healing)

7439-89-6, Iron, biological studies 7439-96-5, Manganese, biological TT studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(ions; use of polymers as microspheres for wound healing)

ΤT 62229-50-9, Epidermal growth factor

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(platelet-derived; use of polymers as microspheres for wound healing) ΙT 51-43-4, Epinephrine. 57-27-2, Morphine, biological studies Procaine 60-54-8, Tetracycline 74-79-3, L-Arginine, biological studies 79-57-2, Oxytetracycline 102-60-3, Quadrol 137-58-6, Lidocaine 437-38-7, Fentanyl 561-27-3, Heroin 1403-66-3, Gentamycin 1405-10-3, Neomycin sulfate 1405-20-5, Polymyxin B sulfate 1405-87-4, Bacitracin 9001-92-7, Proteolytic enzyme. 9003-21-8, 9002-72-6, GH Polymethylacrylate 9003-53-6, Polystyrene 9003-53-6D, Polystyrene, derivs. 9004-61-9, Hyaluronic acid 10102-43-9, Nitric oxide, biological studies 15158-11-9, biological studies 22537-22-0, Magnesium ion, biological studies 22541-53-3, biological studies 23713-49-7, Zinc ion, biological studies 25104-18-1, Polylysine 25619-82-3, Poly-N-ethyl-4-vinyl-pyridinium bromide 38000-06-5, Polylysine 53678-77-6, Muramyl dipeptide 161467-66-9, PF-4 61912-98-9, IGF. RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(use of polymers as microspheres for wound healing)

ΙT 62031-54-3, Fibroblast growth factor

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.alpha. and .beta.; use of polymers as microspheres for wound healing) THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 27

- (1) Adams; Nature 1985, V318, P533 MEDLINE
- (2) Alexander; Mol Cell Biol 1987, V7, P1436 HCAPLUS
- (3) Alexandrow; Cancer res 1995, V55, P1452 HCAPLUS
- (4) Bommelaer; US 5264207 1993 HCAPLUS
- (5) Deckman; US 4380855 1983
- (6) Eppley; US 5092883 1992
- (7) Gentry; Mol cell Biol 1987, V7, P3418 HCAPLUS
- (8) Grosschedl; Cell 1984, V38, P647 HCAPLUS
- (9) Hanahan; Nature 1985, V315, P115 HCAPLUS
- (10) Haukipuro; ann Surg 1991, V213, P75 MEDLINE
- (11) Horton; J Cell Physiol 1989, V141, P8 HCAPLUS
- (12) Mann; PNAS 1995, V92, P4502 HCAPLUS
- (13) McQuillan; Biochem J 1986, V240, P423 HCAPLUS
- (14) Meisner; US 4772591 1988 HCAPLUS
- (15) Mescher; J Immunol 1992, V149, P2402 HCAPLUS
- (16) Momaerts; Proc Natl Acad Sci 1991, V88, P3084
- (17) Ornitz; Cold Spring Harbor Symp 1986, V50, P399
- (18) Osborn; J Orthop Res 1989, V7, P35 HCAPLUS
- (19) Rosen; J cell Physiol 1988, V134, P337 HCAPLUS (20) Selden; Science 1987, V236, P714 HCAPLUS
- (21) Shani; Nature 1985, V314, P283 HCAPLUS

```
(22) Shlomo, M; Reactive Polymers 1983, V1, P241
  (23) Soon-Shiong; US 5700848 1997 HCAPLUS
  (24) Swift; cell 1984, V38, P639 HCAPLUS
  (25) Tardy; US 4931546 1990 HCAPLUS
  (26) Thompson; Invest Radiol 1991, V26, P604
  (27) Weisz; US 5658894 1997 HCAPLUS
 IT
       39391-18-9
       RL: BSU (Biological study, unclassified); BIOL (Biological study)
           (cyclooxygenase-2, inhibitors; use of polymers as
           microspheres for wound healing)
 RN
       39391-18-9 HCAPLUS
 CN
       Synthetase, prostaglandin endoperoxide (9CI) (CA INDEX NAME)
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
       9001-92-7, Proteolytic enzyme. 9004-61-9,
       Hyaluronic acid
       RL: BAC (Biological activity or effector, except adverse); BSU
       (Biological study, unclassified); THU (Therapeutic use); BIOL
       (Biological study); USES (Uses)
           (use of polymers as microspheres for wound healing)
       9001-92-7 HCAPLUS
 RN
 CN
       Proteinase (9CI) (CA INDEX NAME)
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
       9004-61-9 HCAPLUS
       Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
CN
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L111 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2003 ACS
      2000:34995
                    HCAPLUS
DN
      132:102856
      Hyaluronic acid mimics for treatment of inflammation
TI
      and other hyaluronate-associated diseases
      Prestwich, Glenn D.; Ziebell, Michael; Luo, Bai; Zhao, Zhan-Gong
IN
PA
      USA
SO
      PCT Int. Appl., 53 pp.
      CODEN: PIXXD2
DT
      Patent
LA
      English
IC
      ICM C12Q
      1-12 (Pharmacology)
      Section cross-reference(s): 63
FAN.CNT 1
      PATENT NO.
                           KIND DATE
                                                    APPLICATION NO.
                                                                          DATE
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                                  20000113
PΙ
      WO 2000001841
                            A2
                                                    WO 1999-US15263 19990706
      WO 2000001841
                            А3
                                  20011108
          W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FT, FR, GR, GR, IE, IT, LH, MC, NL, PT, SE, BF, BJ, CF, CG,
                ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      CA 2346742
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                                  20000113
                                                   CA 1999-2346742 19990706
     AU 9949716
                            Α1
                                  20000124
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                                                                         19990706
     EP 1169048
                            Α2
                                  20020109
                                                    EP 1999-933718
                                                                         19990706
               AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                IE, SI, LT, LV, FI, RO
PRAI US 1998-91758P
                          Ρ
                                  19980706
     US 1999-347707
                            Α
                                  19990703
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WO 1999-US15263
                             19990706
      HA mimics and methods related thereto are disclosed. In particular,
 AB
      mimics with structures detd. by virtue of novel methods, and the novel
      methods are disclosed. The HA mimics are useful for a variety of
      HA-related uses, including treatment of inflammatory diseases, tumor
      angiogenesis, skin disease, bone disease, and cardiovascular diseases.
      hyaluronate mimic sequence antiinflammatory antitumor
 ST
      angiogenesis
 ΙΤ
      Glycoproteins, specific or class
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (H-CAM (homing cell adhesion mol.); hyaluronic acid
         mimics for treatment of inflammation and other hyaluronate
         -assocd. diseases)
 IΤ
     Receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (RHAMM (receptor for hyaluronic acid-mediated
        motility); hyaluronic acid mimics for treatment of
         inflammation and other hyaluronate-assocd. diseases)
     Glycoproteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (TSG-6; hyaluronic acid mimics for treatment of
        inflammation and other hyaluronate-assocd. diseases)
ΙT
     Neoplasm
         (angiogenesis in; hyaluronic acid mimics for
        treatment of inflammation and other hyaluronate-assocd.
IT
     Antibodies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (antireceptor; hyaluronic acid mimics for treatment
        of inflammation and other hyaluronate-assocd. diseases)
     Cardiovascular system
ΙT
        (disease; hyaluronic acid mimics for treatment of
        inflammation and other hyaluronate-assocd. diseases)
ΙT
     Immunity
        (disorder; hyaluronic acid mimics for treatment of
        inflammation and other hyaluronate-assocd. diseases)
ΤT
     Anti-inflammatory agents
     Antiarthritics
     Antibiotics
       Antirheumatic agents
     Bone, disease
     Immobilization, biochemical
     Infection
     Inflammation
       Osteoarthritis
     Peptide library
     Phage display library
     Protein sequences
      Rheumatoid arthritis
    Skin, disease
    Wound healing
    Wound healing promoters
        (hyaluronic acid mimics for treatment of
        inflammation and other hyaluronate-assocd. diseases)
TΨ
    CD44 (antigen)
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (hyaluronic acid mimics for treatment of
       inflammation and other hyaluronate-assocd. diseases)
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ΙT
      Antitumor agents
          (metastasis; hyaluronic acid mimics for treatment
          of inflammation and other hyaluronate-assocd. diseases)
 IT
      Angiogenesis
          (tumor; hyaluronic acid mimics for treatment of
          inflammation and other hyaluronate-assocd. diseases)
      9004-61-9D, Hyaluronic acid, analogs
 ΤТ
      RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
      unclassified); BIOL (Biological study)
          (hyaluronic acid mimics for treatment of
         inflammation and other hyaluronate-assocd. diseases)
 ΙT
      180731-61-7P
                                       254965-31-6P
                      254965-30-5P
                                                       254965-32-7P
                                                                        254965-33-8P
      254965-34-9P
                      254965-35-0P
                                       254965-36-1P
                                                       254965-37-2P
                                                                        254965-38-3P
      254965-39-4P
                      254965-40-7P
                                       254965-41-8P
                                                       254965-42-9P
                                                                        254965-43-0P
      254965-44-1P
                      254965-45-2P
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                                                                        254965-48-5P
      254965-49-6P
                                       254965-51-0P
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      254965-54-3P
                                       254965-56-5P
                      254965-55-4P
                                                       254965-57-6P
                                                                        254965-58-7P
      254965-59-8P
                      255057-60-4P
                                       255057-68-2P
                                                       255057-71-7P
      RL: BAC (Biological activity or effector, except adverse); BPR (Biological
      process); BSU (Biological study, unclassified); PNU (Preparation,
      unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological
      study); PREP (Preparation); PROC (Process); USES (Uses)
         (hyaluronic acid mimics for treatment of
         inflammation and other hyaluronate-assocd. diseases)
ΙT
      9004-61-9D, Hyaluronic acid, analogs
     RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
      unclassified); BIOL (Biological study)
         (hyaluronic acid mimics for treatment of
         inflammation and other hyaluronate-assocd. diseases)
RN
      9004-61-9 HCAPLUS
      Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L111 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2003 ACS
AN
     1999:783929 HCAPLUS
DN
     132:18780
     Compositions comprising antimicrotubule agents for treating or preventing
TI
     inflammatory diseases
IN
     Hunter, William L.
PA
     Angiotech Pharmaceuticals, Inc., Can.
SO
     PCT Int. Appl., 340 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K031-335
                                                                                      X
          A61K031-425; A61K031-365; A61K031-045; A61K031-505; A61K033-16;
          A61K031-40; A61K031-22
     1-7 (Pharmacology)
     Section cross-reference(s): 63
FAN.CNT 3
     PATENT NO.
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PΙ
     WO 9962510
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         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
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              TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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US 6495579
                       В1
                            20021217
                                           US 1998-88546
PRAI US 1998-88546
                       Α
                            19980601
     US 1996-32215P
                       Р
                            19961202
     US 1997-63087P
                       Ρ
                            19971024
     US 1997-980549
                       A2
                            19971201
    Methods and compns. for treating or preventing inflammatory diseases, e.g.
AB
    psoriasis or multiple sclerosis, are provided, comprising the step of
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delivering to the site of inflammation an antimicrotubule agent, or analog or deriv. thereof. antimicrotubule agent inflammation treatment; microtubule antimicrotubule ST

agent inflammation treatment

ITTranscription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(AP-1 (activator protein 1); antimicrotubule agents for treating or preventing inflammatory diseases)

IT mRNA

> RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(MMP-1 and MMP-3; antimicrotubule agents for treating or preventing inflammatory diseases)

TΤ Transcription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(NF-.kappa.B (nuclear factor .kappa.B); antimicrotubule agents for treating or preventing inflammatory diseases)

ፐጥ Toxins

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(Shiga-like toxin; antimicrotubule agents for treating or preventing inflammatory diseases)

ΙT Cell proliferation

(T cell; antimicrotubule agents for treating or preventing inflammatory diseases)

ITNeutrophil

(activation; antimicrotubule agents for treating or preventing inflammatory diseases)

ITConnective tissue

Surgery

(adhesions; antimicrotubule agents for treating or preventing inflammatory diseases)

Medical goods TT

(antimicrotubule agent-coated; antimicrotubule agents for treating or preventing inflammatory diseases)

TT Adhesion, biological

Angiogenesis inhibitors

Anti-inflammatory agents

Antiarthritics

Antitumor agents

Astrocyte

Cytotoxic agents

Drug delivery systems

Micelles

Microtubule

Neutrophil

Permeation enhancers

Psoriasis

Transplant rejection

(antimicrotubule agents for treating or preventing inflammatory diseases)

ΙT Diterpenes

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(antimicrotubule agents for treating or preventing inflammatory diseases) IΨ Aggrecans RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (antimicrotubule agents for treating or preventing inflammatory diseases) ITAlbumins, biological studies Fibronectins Gelatins, biological studies Polymers, biological studies Polyoxyalkylenes, biological studies Polyurethanes, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antimicrotubule agents for treating or preventing inflammatory diseases) IT Polymers, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (block, diblock; antimicrotubule agents for treating or preventing inflammatory diseases) ፐጥ Polymers, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (block, triblock; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Medical goods (catheters, indwelling, antimicrotubule agent-coated; antimicrotubule agents for treating or preventing inflammatory diseases) IT Neutrophil (degranulation; antimicrotubule agents for treating or preventing inflammatory diseases) ITPeriodontium (disease; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Blood vessel (endothelium; antimicrotubule agents for treating or preventing inflammatory diseases) Drug delivery systems ΙT (films; antimicrotubule agents for treating or preventing inflammatory diseases) TΤ Drug delivery systems (gels; antimicrotubule agents for treating or preventing inflammatory diseases) ΤT Prosthetic materials and Prosthetics (implants, vascular, antimicrotubule agent-coated; antimicrotubule agents for treating or preventing inflammatory diseases) TΤ Lung, disease (inflammation; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Intestine, disease (inflammatory; antimicrotubule agents for treating or preventing inflammatory diseases) IT Skin (keratinocyte; antimicrotubule agents for treating or preventing inflammatory diseases) IT Drug delivery systems (microcapsules, nylon microcapsules; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Drug delivery systems (microparticles; antimicrotubule agents for treating or preventing inflammatory diseases) ITDrug delivery systems (nasal; antimicrotubule agents for treating or preventing inflammatory

diseases)

IT Prostate gland Prostate gland (neoplasm, inhibitors; antimicrotubule agents for treating or preventing inflammatory diseases) IT Cell activation Cell degranulation (neutrophil; antimicrotubule agents for treating or preventing inflammatory diseases) Polyamides, biological studies TΤ RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nylon microcapsules; antimicrotubule agents for treating or preventing inflammatory diseases) IT Drug delivery systems (ointments; antimicrotubule agents for treating or preventing inflammatory diseases) IT Drug delivery systems (oral; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Drug delivery systems (pastes; antimicrotubule agents for treating or preventing inflammatory diseases) ITKidney, disease (polycystic; antimicrotubule agents for treating or preventing inflammatory diseases) Glycols, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (polymers; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT (polyp; antimicrotubule agents for treating or preventing inflammatory diseases) ΤТ Proliferation inhibition (proliferation inhibitors; antimicrotubule agents for treating or preventing inflammatory diseases) ITT cell (lymphocyte) (proliferation; antimicrotubule agents for treating or preventing inflammatory diseases) ITAntitumor agents (prostate gland; antimicrotubule agents for treating or preventing inflammatory diseases) IT Artery, disease (restenosis; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Cartilage Shark (shark cartilage powder; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Drug delivery systems (sprays, nanospray; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Artery, disease (stenosis; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Medical goods (stents, antimicrotubule agent-coated; antimicrotubule agents for treating or preventing inflammatory diseases) IT Protamines RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (sulfates, tetrahydro; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Synovial membrane

(synoviocyte; antimicrotubule agents for treating or preventing

inflammatory diseases) ΙT Lupus erythematosus (systemic; antimicrotubule agents for treating or preventing inflammatory diseases) Multiple sclerosis IT (therapeutic agents; antimicrotubule agents for treating or preventing inflammatory diseases) ΙT Drug delivery systems (topical; antimicrotubule agents for treating or preventing inflammatory diseases) IT 52-21-1 57-22-7 59-05-2 64-86-8 145-63-1 446-72-0 865-21-4, Vincaleukoblastine 7689-03-4 9050-30-0D, fragments 10540-29-1 27774-13-6 37353-31-4, Vanadate 38213-69-3 52205-73-9 63177-57-1 66107-60-6 77699-47-9, Herbimycin **86102-31-0** 100827-28-9 144676-04-0 174882-69-0, Pycnogenol RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (antimicrotubule agents for treating or preventing inflammatory IT 69-33-0 69-33-0D, derivs. 107-41-5 107-41-5D, derivs. 459-73-4 459-73-4D, derivs. 7784-18-1, Aluminum fluoride (AlF3) 7784-18-1D, Aluminum fluoride (AlF3), derivs. 7789-20-0, Water-d2 7789-20-0D, Water-d2, derivs. 33069-62-4 33069-62-4D, derivs. 85419-94-9 85419-94-9D, derivs. 127943**-**53-7 127943-53-7D, derivs. 149550-36-7 149550-36-7D, derivs. 152044-53-6 152044-53-6D, derivs. 152044-54-7D, derivs. RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (antimicrotubule agents for treating or preventing inflammatory diseases) TΤ 9001-12-1, Collagenase 11062-77-4, Superoxide **79955-99-0** , Stromelysin 1 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (antimicrotubule agents for treating or preventing inflammatory diseases) TΤ 1338-43-8 7585-39-9D, .beta.-Cyclodextrin, Hydroxypropyl derivs. 9002-89-5 9004-54-0, Dextran, biological studies 9003-01-4 9004-57-3 9004-61-9D, Hyaluronic acid, crosslinked 9004-67-5 9004-64-2 9011-14-7 9012-76-4, Chitosan 9012-76-4D, 17465-86-0, .gamma.-Cyclodextrin Chitosan, crosslinked 17465-86-0D, .gamma.-Cyclodextrin, Hydroxypropyl derivs. 24937-78-8 24980-41-4 25104-18-1 25248-42-4, Poly[oxy(1-oxo-1,6-hexanediyl)] 25322-68-3 34346-01-5 38000-06-5 80137-67-3 106392-12-5 119388-27-1 188360-48-7 250580-74-6 251911-63-4 251911-67-8 263237**-**87-2 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antimicrotubule agents for treating or preventing inflammatory diseases) TΤ 57-55-6, 1,2-Propanediol, biological studies 64-17-5, Ethanol, biological studies 110-27-0 111-90-0 112-80-1, 9-Octadecenoic acid (9Z)-, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (permeation enhancer; antimicrotubule agents for treating or preventing inflammatory diseases) IT 86102-31-0 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (antimicrotubule agents for treating or preventing inflammatory diseases) 86102-31-0 HCAPLUS RN

Proteinase inhibitor, TIMP (9CI) (CA INDEX NAME)

CN

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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9001-12-1, Collagenase 79955-99-0, Stromelysin 1
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (antimicrotubule agents for treating or preventing inflammatory
        diseases)
RN
     9001-12-1 HCAPLUS
     Collagenase (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     79955-99-0 HCAPLUS
RN
CN
     Stromelysin 1 (9CI)
                         (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9004-61-9D, Hyaluronic acid, crosslinked
     RL: THU (Therapeutic use); BIOL (Biological study); USES
        (antimicrotubule agents for treating or preventing inflammatory
        diseases)
     9004-61-9 HCAPLUS
RN
CN
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L111 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2003 ACS
     1999:753089 HCAPLUS
DN
     131:356137
TI
     Pharmaceuticals complexed with hyaluronic acid for
     diseases of the joints
     Tamura, Tatsuya; Okamachi, Akira
ΙN
PA
     Chugai Seiyaku Kabushiki Kaisha,
     Japan
SO
     PCT Int. Appl., 63 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
IC
     ICM A61K031-725
     ICS C08B037-08; A61K045-00; A61K031-725; A61K031-40
CC
     63-6 (Pharmaceuticals)
FAN.CNT 1
     PATENT NO.
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                                          APPLICATION NO. DATE
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PΙ
    WO 9959603
                     A1 19991125
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            JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
            MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
            TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
            RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
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            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    CA 2332802
                      AΑ
                           19991125
                                         CA 1999-2332802 19990519 <--
    AU 9938490
                      A1
                           19991206
                                          AU 1999-38490
                                                           19990519 <--
    AU 752280
                      В2
                            20020912
    EP 1082963
                      A1
                           20010314
                                          EP 1999-921167
                                                          19990519 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
PRAI JP 1998-138329
                           19980520
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    JP 1998-224187
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                           19980807
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    JP 1999-43064
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                           19990222
                                    <--
    WO 1999-JP2600
                      W
                           19990519
                                     <--
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AB
      Complexes of a pharmaceutical with hyaluronic acid or
      deriv. thereof, are prepd. for inserting the pharmaceutical to the glenoid
      cavities. For example, one or more pharmaceutical such as matrix
      proteinase inhibitor is bound to hyaluronic acid
      or its deriv. The medications are useful in treating chronic joint
      rheumatism.
 ST
      joint disease pharmaceutical hyaluronate complex
 ΙT
      Joint, anatomical
         (disease; pharmaceutical-hyaluronate complexes for
         treatment of)
 ΙT
      Drugs
      Rheumatic diseases
         (hyaluronate-pharmaceutical complexes for treatment of
         diseases in bone joints)
 IT
      9001-92-7D, Proteinase, inhibitor, complex with
     hyaluronate
      RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (for treatment of diseases in bone joints)
 IT
      9004-61-9, Hyaluronic acid 9004-61-9D
      , Hyaluronic acid, derivs.
     RL: BUU (Biological use, unclassified); BIOL (Biological study);
     USES (Uses)
         (hyaluronate-pharmaceutical complexes for treatment of
        diseases in bone joints)
              THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
 (1) Anon; EP 216453 A HCAPLUS
 (2) Anon; US 4851521 A HCAPLUS
 (3) Anon; US 4965353 A HCAPLUS
 (4) Anon; US 5202431 A HCAPLUS
 (5) Anon; US 5336767 A HCAPLUS
(6) Anon; US 5773438 A HCAPLUS
 (7) Anon; US 5892112 A HCAPLUS
(8) Anon; EP 690841 A HCAPLUS
(9) Anon; WO 95/199965 A1
(10) Fidia, S; JP 62-64802 A 1987 HCAPLUS
(11) Glycomed Inc; JP 09-501183 A 1997
(12) Vasilionkaitis, V; Sint Izuch Fiziol Akt Veshchestv Tezisy Dokl Mezhvuz
    Nauchn Konf Uchastiem Farmakol Latv Est SSR 1975, P20 HCAPLUS
     9001-92-7D, Proteinase, inhibitor, complex with
     hyaluronate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (for treatment of diseases in bone joints)
     9001-92-7 HCAPLUS
RN
     Proteinase (9CI)
CN
                       (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9004-61-9, Hyaluronic acid 9004-61-9D
     , Hyaluronic acid, derivs.
     RL: BUU (Biological use, unclassified); BIOL (Biological study);
     USES (Uses)
        (hyaluronate-pharmaceutical complexes for treatment of
        diseases in bone joints)
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI)
                                 (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI)
                                  (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L111 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2003 ACS
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1999:648783 HCAPLUS
DN
     131:252570
TI
     Local drug preparations containing hyaluronate salt and soluble
     antiinflammatory agents for treatment of chronic rheumatism
ΙN
     Baba, Takaaki
     Shiseido Co., Ltd., Japan
PA
     Jpn. Kokai Tokkyo Koho, 4 pp.
SO
     CODEN: JKXXAF
DT
     Patent
     Japanese
LĄ
IC.
     ICM A61K031-725
     ICS A61K031-725; A61K009-08; A61K031-56; A61K045-00
CC
     1-7 (Pharmacology)
     Section cross-reference(s): 63
FAN.CNT 1
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     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
                      ____
                                           -----
                            19991012
     JP 11279065
                                           JP 1998-96901
                       A2
                                                            19980325
                            19980325
PRAI JP 1998-96901
   Local drug prepns. contg. hyaluronic acid and its
     salts and sol. steroidal and nonsteroidal antiinflammatory agents are
     claimed for treatment of chronic rheumatism. Examples of topical
     injections sterilized by filtration were given.
ST
     topical hyaluronate antiinflammatory rheumatism
IT
     Drug delivery systems
        (injections; local drug prepns. contg. hyaluronate salt and
        sol. antiinflammatory agents for treatment of chronic rheumatism)
ΙT
     Anti-inflammatory agents
       Antirheumatic agents
     Drug interactions
        (local drug prepns. contg. hyaluronate salt and sol.
        antiinflammatory agents for treatment of chronic rheumatism)
ΙT
     Steroids, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (local drug prepns. contg. hyaluronate salt and sol.
        antiinflammatory agents for treatment of chronic rheumatism)
ΙT
     Anti-inflammatory agents
        (nonsteroidal; local drug prepns. contg. hyaluronate salt and
        sol. antiinflammatory agents for treatment of chronic rheumatism)
IT
     Drug delivery systems
        (topical; local drug prepns. contg. hyaluronate salt and sol.
        antiinflammatory agents for treatment of chronic rheumatism)
ΙT
     54-21-7, Sodium salicylate
                                  2392-39-4, Dexamethasone sodium phosphate
     9004-61-9, Hyaluronic acid 9067-32-7
     , Sodium hyaluronate
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (local drug prepns. contg. hyaluronate salt and sol.
        antiinflammatory agents for treatment of chronic rheumatism)
ΙT
     9004-61-9, Hyaluronic acid 9067-32-7
     , Sodium hyaluronate
    RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (local drug prepns. contg. hyaluronate salt and sol.
       antiinflammatory agents for treatment of chronic rheumatism)
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI)
                                (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
```

```
RN
     9067-32-7 HCAPLUS
     Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L111 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2003 ACS
     1997:47282 HCAPLUS
DN
     126:84211
     Anti-tumor activity of the dual cyclooxygenase-1/2
ΤI
     inhibitor diclofenac in combination with hyaluronan
     Seed, M. P.; Freemantle, C. N.; Papworth, J.; Brown, J. R.; Willoughby, D.
AU
     Medical College, Saint Bartholomew's Hospital, London, ECIM 6BQ, UK
CS
     Round Table Series - Royal Society of Medicine Press (1996), 45(Fourth
     International Workshop on Hyaluronan in Drug Delivery, 1996), 59-67
     CODEN: RTMPFO
     Royal Society of Medicine Press
     Journal
DT
     English
CC
     1-6 (Pharmacology)
     Diclofenac dose-dependently inhibited the growth of colon-26 murine
     adenocarcinoma cell proliferation and the action of diclofenac was not
     affected by hyaluronan at 1 .mu.g/mL. The role of inhibition of
     cyclooxygenase-1/2 by diclofenac in its antitumor action
     is discussed.
     diclofenac hyaluronan colon carcinoma inhibitor; cyclooxygenase
     diclofenac antitumor colon carcinoma
IT
     Antitumor agents
        (antitumor activity of the dual cyclooxygenase-1/2
        inhibitor diclofenac in combination with hyaluronan
ΙT
     Antitumor agents
        (colon carcinoma; antitumor activity of the dual cyclooxygenase
        -1/2 inhibitor diclofenac in combination with
        hyaluronan)
IT
     Intestine, neoplasm
        (colon, carcinoma, inhibitors; antitumor activity of the dual
        cyclooxygenase-1/2 inhibitor diclofenac in
        combination with hyaluronan)
IT
     9004-61-9, Hyaluronan
                             15307-86-5, Diclofenac
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antitumor activity of the dual cyclooxygenase-1/2
        inhibitor diclofenac in combination with hyaluronan
IT
     39391-18-9, Cyclooxygenase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (antitumor activity of the dual cyclooxygenase-1/2
        inhibitor diclofenac in combination with hyaluronan
ΙT
     9004-61-9, Hyaluronan
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antitumor activity of the dual cyclooxygenase-1/2
        inhibitor diclofenac in combination with hyaluronan
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI)
                                 (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
```

```
IT
     39391-18-9, Cyclooxygenase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (antitumor activity of the dual cyclooxygenase-1/2
        inhibitor diclofenac in combination with hyaluronan
     39391-18-9 HCAPLUS
RN
     Synthetase, prostaglandin endoperoxide (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L111 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2003 ACS
     1995:364299 HCAPLUS
AN
DN
     122:115054
     Purified natural and synthetic compounds for the treatment of
TI
     osteoarthritis
     Lansbury, Peter T., Jr.; Hauschka, Peter V. Neogenix, Inc., USA
ΙN
PA
     PCT Int. Appl., 41 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K031-165
          A61K031-075; A61K031-235; A61K031-215; A61K031-655; A61K031-715;
          A61K031-725; A61K031-73; A61K031-735; C07H003-06; C07H007-033;
          CO7HO13-02; CO8BO37-10; CO7CO15-20; CO7CO15-24; CO7CO15-27;
          C07C211-43; C07C211-54; C07C225-02; C07C233-01
     63-7 (Pharmaceuticals)
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO.
                                                               DATE
                             _____
PΙ
     WO 9428889
                      A1
                             19941222
                                           WO 1994-US6490
                                                              19940608
         W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KG, KR, KZ, LK,
         LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, UA, UZ RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9472058
                             19950103
                                             AU 1994-72058
                                                               19940608
                       A1
PRAI US 1993-73189
                             19930608
     WO 1994-US6490
                             19940608
AB
     The present invention relates to individual, well-defined compds. and the
     uses of these compds., alone or in conjunction with bioactive mols. such
     as growth factors or metalloproteinase inhibitors, for the
     repair of cartilage damage as, for example, is found in osteoarthritis.
     Such well-defined compds. may include purified components of the
     extracellular matrix, derivs. of extracellular matrix
     components, and glycosaminoglycan mimics. The glycosaminoglycan mimics
     include chondroitin-4-sulfate, chondroitin-6-sulfate, hyaluronic
     acid, heparin, heparan sulfate, keratan sulfate, dermatan sulfate,
     poly-N-acetylglucosamine, and poly-N-glucosamine.
ST
     extracellular matrix glycosaminoglycan osteoarthritis
IT
     Animal growth regulators
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (connective tissue-activating; glycosaminoglycan and bioactive mol.
        combinations for treatment of osteoarthritis)
IT
     Cartilage
     Extracellular matrix
        (extracellular matrix components for treatment of osteoarthritis)
ΙT
     Glycosaminoglycans, biological studies
     Proteoglycans, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (extracellular matrix components for treatment of osteoarthritis)
ΙT
     Chondrocyte
```

(screening of glycosaminoglycans for their ability to repair damaged

cartilage) ΙT Inflammation inhibitors (antiarthritics, extracellular matrix components for treatment of osteoarthritis) IT Animal growth regulators RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (blood platelet-derived growth factors, glycosaminoglycan and bioactive mol. combinations for treatment of osteoarthritis) ΙT 145-63-1, Suramin 573-58-0, Congo red 9004-61-9, 9005-49-6, Heparin, biological studies Hyaluronic acid 9050-30-0, Heparan sulfate 9056-36-4, Keratan sulfate 24967-94-0, Dermatan sulfate Chondroitin-4-sulfate Chondroitin-6-sulfate 27555-50-6 35110-26-0, Polyglucosamine RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (extracellular matrix components for treatment of osteoarthritis) 61912-98-9, Insulin-like growth factor 62031-54-3, Cartilage-derived 105844-41-5, Plasminogen activator inhibitor growth factor 124861-55-8, TIMP2 140208-24-8, TIMP1 145266-99-5, Metalloproteinase inhibitor RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (glycosaminoglycan and bioactive mol. combinations for treatment of osteoarthritis) IT7782-77-6, Nitrous acid 9001-06-3, Chitinase 9024-13-9, Chondroitinase 9025-39-2, Heparinase 9047-57-8, Chondroitinase AC RL: NUU (Other use, unclassified); USES (Uses) (purifn. of extracellular matrix for use in repair of damaged cartilage) IT 9004-61-9, Hyaluronic acid RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (extracellular matrix components for treatment of osteoarthritis) RN 9004-61-9 HCAPLUS Hyaluronic acid (8CI, 9CI) (CA INDEX NAME) CN \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* IT 124861-55-8, TIMP2 140208-24-8, TIMP1 145266-99-5, Metalloproteinase inhibitor RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (glycosaminoglycan and bioactive mol. combinations for treatment of osteoarthritis) RN 124861-55-8 HCAPLUS CN Proteinase inhibitor, TIMP 2 (9CI) (CA INDEX NAME) \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* RN 140208-24-8 HCAPLUS Proteinase inhibitor, TIMP 1 (9CI) CN (CA INDEX NAME) \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* RN 145266-99-5 HCAPLUS Proteinase inhibitor, metallo- (9CI) CN (CA INDEX NAME) \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* L111 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2003 ACS AN **1994:236174** HCAPLUS DN 120:236174 тT Use of lipid-bound glycosaminoglycans for the treatment of rheumatoid arthritis IN Aoki, Shigehisa; Iwasaki, Shinichi; Sugiura, Nobuo; Suzuki, Sakaru; Kimata, Koji PA Seikagaku Corp., Japan SO Eur. Pat. Appl., 26 pp.

```
CODEN: EPXXDW
DT
      Patent
LA
      English
IC
      ICM A61K031-735
CC
     1-7 (Pharmacology)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                            APPLICATION NO. DATE
     EP 581282
                                             EP 1993-112169 19930729
                       A1
                             19940202
                      B1 19990512
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

      JP 06072893
      A2
      19940315
      JP 1992-203558

      CA 2101482
      AA
      19940131
      CA 1993-2101482

                                                               19920730
                                             CA 1993-2101482 19930728
     AU 9344314
                       A1 19940203
                                            AU 1993-44314
                                                               19930729
     AU 668963
                       B2 19960523
     US 5470578
                            19951128
                       A
                                             US 1993-98936
                                                               19930729
     AT 179892
                        E
                             19990515
                                             AT 1993-112169
                                                               19930729
PRAI JP 1992-203558
                             19920730
     A lipid-bound glycosaminoglycan is prepd. as an
     antirheumatic agent to prevent the extension of pannus. For
     example, hyaluronic acid was partially oxidized,
     lactonized, and reacted with dipalmitoylphosphatidylethanolamine
     (PE) to give a PE-bound hyaluronic acid.
     Inhibitory effect of the PE-bound hyaluronic
     acid on extension of pannus in simultaneous organ
     culture of rabbit articular cartilage tissue and synovial membrane tissue
     was demonstrated.
     lipid bound glycosaminoglycan rheumatoid arthritis treatment;
     antirheumatic hyaluronate phosphatidylethanolamine
     conjugate
IT
     Phosphatidylserines
     RL: BIOL (Biological study)
        (C16-18, conjugates with chondroitin sulfate, as
        antirheumatic agents)
IT
     Inflammation inhibitors
        (antiarthritics, lipid-bound glycosaminoglycans for)
IT
     Inflammation inhibitors
        (antirheumatics, lipid-bound glycosaminoglycans as)
ΙT
     Synovial membrane
        (disease, pannus, extension of, in arthritis, prevention of, lipid-
        bound glycosaminoglycans for)
ΙT
     Lipids, compounds
     Phospholipids, compounds
     RL: BIOL (Biological study)
        (glycero-, reaction products, with glycosaminoglycans,
        antirheumatic activity of)
ΙT
     Pharmaceutical dosage forms
        (injections, intraarticular, lipid-bound glycosaminoglycans
        in, for treatment of rheumatoid arthritis)
IT
     Lipids, compounds
     Phosphatidylethanolamines
     Phosphatidylserines
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (reaction products, **antirheumatic*** activity
        {\tt ofPhosphatidylethanolaminesnog})
ΙT
     Glycosaminoglycans, compounds
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (reaction products, with lipids, antirheumatic
        activity of)
ΙT
     9004-61-9, Hyaluronic acid
                                   9005-49-6,
     Heparin, reactions 9007-27-6, Chondroitin
```

9007-28-7,

```
9050-30-0, Heparan sulfate
      Chondroitin sulfate
                                                         24967-94-0, Dermatan
      sulfate
      RL: BIOL (Biological study)
         (partial oxidn. and lactonization of, in prepn. of
         antirheumatic lipid conjugates)
 IT
      154275-57-7P
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
         (prepn. and reaction of, with aminated chondroitin sulfate)
 TT
      28474-99-9P
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
         (prepn. and reaction of, with imides)
      3026-45-7DP, Dipalmitoylphosphatidylethanolamine, reaction
TT
      products with hyaluronate 9004-61-9DP,
     Hyaluronic acid, lactones, reaction products
     with dipalmitoylphosphatidylethanolamine
                                                 9007-28-7DP, Chondroitin
     sulfate, lactones, reaction products with
     stearoylpalmitoylphosphatidylserine
                                           154275-57-7DP, reaction
     products with aminated chondroitin sulfate
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (prepn. of, as antirheumatic agent)
     108-30-5, Succinic anhydride, reactions
TΤ
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (reaction of, with glyceryl monostearate)
IT
     31566-31-1, Glyceryl monostearate
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with succinic anhydride)
IT
     9004-61-9, Hyaluronic acid
     RL: BIOL (Biological study)
        (partial oxidn. and lactonization of, in prepn. of
        antirheumatic lipid conjugates)
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9004-61-9DP, Hyaluronic acid, lactones,
     reaction products with dipalmitoylphosphatidylethanolamine
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, as antirheumatic agent)
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
=> fil req
FILE 'REGISTRY' ENTERED AT 17:14:09 ON 21 JAN 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.
STRUCTURE FILE UPDATES:
                          20 JAN 2003 HIGHEST RN 479577-81-6
DICTIONARY FILE UPDATES: 20 JAN 2003 HIGHEST RN 479577-81-6
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Please note that search-term pricing does apply when conducting SmartSELECT searches.

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can tot

L112 ANSWER 1 OF 20 REGISTRY COPYRIGHT 2003 ACS

RN 434283-21-3 REGISTRY

CN Carbamic acid, [3-[(18S,21R)-18-(1,1-dimethylethyl)-21-[(1S)-2-(hydroxyamino)-1-methyl-2-oxoethyl]-23-methyl-1,17,20-trioxo-6,9,12-trioxa-2,16,19-triazatetracos-1-yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C34 H59 N5 O10

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:24315

L112 ANSWER 2 OF 20 REGISTRY COPYRIGHT 2003 ACS

RN **434283-20-2** REGISTRY

CN Carbamic acid, [3-[(18S,21R)-18-(1,1-dimethylethyl)-21-[2-(hydroxyamino)-2-oxoethyl]-23-methyl-1,17,20-trioxo-6,9,12-trioxa-2,16,19-triazatetracos-1-

yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C33 H57 N5 O10

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:24315

L112 ANSWER 3 OF 20 REGISTRY COPYRIGHT 2003 ACS

RN **434283-19-9** REGISTRY

CN Carbamic acid, [3-[17-[(6S,7R,10S)-6-[(hydroxyamino)carbonyl]-7-(2-methylpropyl)-8-oxo-2-oxa-9-azabicyclo[10.2.2]hexadeca-12,14,15-trien-10-yl]-1,17-dioxo-6,9,12-trioxa-2,16-diazaheptadec-1-yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C39 H59 N5 O11

SR CA

LC STN Files: CA, CAPLUS

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:24315

L112 ANSWER 4 OF 20 REGISTRY COPYRIGHT 2003 ACS

RN **434283-18-8** REGISTRY

CN Carbamic acid, [3-[(18S,21R,22S)-18-(1,1-dimethylethyl)-22[(hydroxyamino)carbonyl]-21-(2-methylpropyl)-1,17,20-trioxo-6,9,12,23tetraoxa-2,16,19-triazatetracos-1-yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI)
(CA INDEX NAME)

FS STEREOSEARCH

MF C34 H59 N5 O11

SR CA

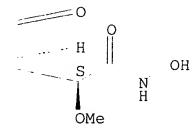
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

\_\_ Bu−t



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:24315

L112 ANSWER 5 OF 20 REGISTRY COPYRIGHT 2003 ACS

RN **434283-17-7** REGISTRY

CN Carbamic acid, [3-[(18S,21R)-18-(1,1-dimethylethyl)-21-[(1S)-1-hydroxy-2-(hydroxyamino)-2-oxoethyl]-23-methyl-1,17,20-trioxo-6,9,12-trioxa-2,16,19-triazatetracos-1-yl]bicyclo[2.2.1]hept-5-en-2-yl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C33 H57 N5 O11

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-B

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:24315

L112 ANSWER 6 OF 20 REGISTRY COPYRIGHT 2003 ACS

RN **433708-37-3** REGISTRY

CN 6,9,12-Trioxa-2,16,19-triazatetracosanoic acid, 18-(1,1-dimethylethyl)-21-[(1S)-1-hydroxy-2-(hydroxyamino)-2-oxoethyl]-23-methyl-17,20-dioxo-, phenylmethyl ester, (18S,21R)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C32 H54 N4 O10

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-B

S OH N H

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:24315

L112 ANSWER 7 OF 20 REGISTRY COPYRIGHT 2003 ACS

RN **177402-92-5** REGISTRY

CN Hyaluronic acid, zinc salt (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Curiosin

CN Zinc hyaluronate

MF Unspecified

CI MAN

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

## \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

15 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

15 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:44739

REFERENCE 2: 137:333054

REFERENCE 3: 137:268441

REFERENCE 4: 136:369236

REFERENCE 5: 136:221741

REFERENCE 6: 135:92794

REFERENCE 7: 135:86710

REFERENCE 8: 134:9354

REFERENCE 9: 133:217693

REFERENCE 10: 133:125288

L112 ANSWER 8 OF 20 REGISTRY COPYRIGHT 2003 ACS

RN **146480-36-6** REGISTRY

CN Gelatinase B (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 92,000-Mol.-wt. gelatinase

```
92,000-Mol.-wt. type IV collagenase
CN
CN
      92-kD Gelatinase
CN
      92-kDa Gelatinase
CN 92-kDa Type IV collagenase
      95 kDa Type IV collagenase/gelatinase
CN
CN
     Collagenase IV
     Collagenase type IV
CN
CN
     E.C. 3.4.24.35
CN
     Gelatinase MMP 9
CN
     Matrix metalloprotease 9
CN
     Matrix metalloproteinase 9
CN
     MMP 9
CN
     Type IV collagen metalloproteinase
CN
     Type IV collagenase
CN
     Type IV collagenase/gelatinase
MF
     Unspecified
CI
     MAN
SR
     CA
LC
     STN Files:
                  ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
       CA, CAPLUS, CEN, CIN, EMBASE, PROMT, TOXCENTER, USPATFULL
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
            2950 REFERENCES IN FILE CA (1962 TO DATE)
              10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            2966 REFERENCES IN FILE CAPLUS (1962 TO DATE)
REFERENCE
            1:
               138:37954
REFERENCE
            2:
                138:37789
                138:37771
REFERENCE
            3:
REFERENCE
                138:37566
            4:
               138:37447
REFERENCE
            5:
REFERENCE
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            7: 138:37277
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            9:
                138:37069
REFERENCE 10: 138:36911
L112 ANSWER 9 OF 20 REGISTRY COPYRIGHT 2003 ACS.
     146480-35-5 REGISTRY
     Gelatinase A (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     72 kDa Gelatinase
     72 kDa Gelatinase type A
CN
CN
     72,000-Mol.-wt. gelatinase
CN
     72,000-Mol.-wt. type IV collagenase
     Collagenase IV
CN
CN
     Collagenase type IV
CN
     E.C. 3.4.24.24
CN
     Matrix metalloprotease 2
CN
     Matrix metalloproteinase 2
CN
     MMP 2
CN
     Type IV collagen metalloproteinase
CN
     Type IV collagenase
CN
     Type IV collagenase/gelatinase
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MF
     Unspecified
CI
     MAN
SR
     CA
LC
     STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
       CA, CAPLUS, CEN, CIN, EMBASE, PROMT, TOXCENTER, USPAT7, USPATFULL
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
            3127 REFERENCES IN FILE CA (1962 TO DATE)
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REFERENCE
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REFERENCE
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            7: 138:36820
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REFERENCE
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               138:36590
            9:
REFERENCE
               138:36281
REFERENCE 10: 138:35169
L112 ANSWER 10 OF 20 REGISTRY COPYRIGHT 2003 ACS
     145266-99-5 REGISTRY
     Proteinase inhibitor, metallo- (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
     Metalloprotease inhibitor
CN
     Metalloproteinase inhibitor
MF
     Unspecified
CI
    MAN
SR
     CA
LC
     STN Files:
                  ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS, CIN,
       PROMT, TOXCENTER, USPATFULL
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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            1: 137:346178
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REFERENCE
            5: 136:290000
REFERENCE
            6:
              136:227913
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REFERENCE

REFERENCE

7: 136:131785

8: 136:49642

REFERENCE 9: 136:31664 REFERENCE 10: 136:1566 L112 ANSWER 11 OF 20 REGISTRY COPYRIGHT 2003 ACS **141907-41-7** REGISTRY Proteinase, matrix metallo- (9CI) (CA INDEX NAME) OTHER NAMES: Matrix metalloendoproteinase Matrix metalloprotease  ${\tt Matrix\ metalloprotease\ HIPHUM35}$ Matrix metalloproteinase Matrix-degrading metalloproteinase CN MF Unspecified MAN CI SR CA STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CAPLUS, CEN, CHEMCATS, CIN, PROMT, TOXCENTER, USPAT7, USPATFULL \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* 2210 REFERENCES IN FILE CA (1962 TO DATE) 13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 2230 REFERENCES IN FILE CAPLUS (1962 TO DATE) REFERENCE 1: 138:37992 REFERENCE 2: 138:37981 REFERENCE 3: 138:37447 REFERENCE 4: 138:36719 REFERENCE 5: 138:36683 6: 138:35680 REFERENCE REFERENCE 7: 138:35169 8: 138:35094 REFERENCE REFERENCE 9: 138:22909 REFERENCE 10: 138:22681 L112 ANSWER 12 OF 20 REGISTRY COPYRIGHT 2003 ACS **140208-24-8** REGISTRY Proteinase inhibitor, TIMP 1 (9CI) (CA INDEX NAME) OTHER NAMES: CN TIMP 1 CN Tissue inhibitor of metalloproteinase-1 MF Unspecified CI MAN SR CA LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CIN, EMBASE, PROMT, TOXCENTER, USPAT7, USPATFULL \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* 1635 REFERENCES IN FILE CA (1962 TO DATE) 33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

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2: 138:37027
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REFERENCE
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             5:
                138:23404
REFERENCE
                138:23009
REFERENCE
             6:
            7:
REFERENCE
                138:22812
REFERENCE
            8:
                 138:21264
             9:
                 138:12378
REFERENCE
REFERENCE 10:
                 138:11772
L112 ANSWER 13 OF 20 REGISTRY COPYRIGHT 2003 ACS
     124861-55-8 REGISTRY
RN
     Proteinase inhibitor, TIMP 2 (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
     TIMP 2
     TIMP-2 proteinase inhibitor
CN
CN
     Tissue inhibitor metalloproteinase-2
DR
     127497-59-0
MF
     Unspecified
CI
     MAN
SR
     CA
       'N Files: ADISINSIGHT, AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CIN, DDFU, DRUGU, EMBASE, MEDLINE, PHAR, PROMT,
LC
     STN Files:
       TOXCENTER, USPAT2, USPATFULL
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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                138:22812
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REFERENCE
            6:
                138:22748
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REFERENCE
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            8:
                 138:20443
REFERENCE
            9:
                 138:19264
REFERENCE 10:
                 138:11772
L112 ANSWER 14 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN
     86102-31-0 REGISTRY
     Proteinase inhibitor, TIMP (9CI) (CA INDEX NAME)
OTHER NAMES:
```

```
CN
     Metalloproteinase elastase inhibitor
CN
CN
     TIMP metalloproteinase inhibitor
CN
     TIMP proteinase inhibitor
     Tissue inhibitor of matrix metalloproteinase
CN
     Tissue inhibitor of metalloproteinase
MF
     Unspecified
CI
     MAN
                  ADISINSIGHT, ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, CA,
LC
     STN Files:
       CAPLUS, CIN, PHAR, PROMT, TOXCENTER, USPATEULL
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            3: 138:19488
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REFERENCE
            9: 137:347243
REFERENCE 10: 137:346861
L112 ANSWER 15 OF 20 REGISTRY COPYRIGHT 2003 ACS
     79955-99-0 REGISTRY
     Stromelysin 1 (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
    E.C. 3.4.24.17
    Matrix metalloprotease 3
CN
    Matrix metalloproteinase 3
CN
CN
    Matrix metalloproteinase MMP-3
CN
CN
    Neutral proteoglycanase
CN
     Proteoglycanase
CN
    Stromelysin
CN
    Transin
DR
     107087-03-6, 118368-07-3
MF
    Unspecified
CI
    MAN
LC
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      CA, CAPLUS, CEN, CIN, EMBASE, IPA, PROMT, TOXCENTER, USPAT7ULL
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138:36908
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            9:
                138:29102
REFERENCE 10:
                138:23360
L112 ANSWER 16 OF 20 REGISTRY COPYRIGHT 2003 ACS
     39391-18-9 REGISTRY
     Synthetase, prostaglandin endoperoxide (9CI) (CA INDEX NAME)
OTHER NAMES:
     Arachidonate cyclooxygenase
CN
     Arachidonic acid cyclooxygenase
CN
     Arachidonic cyclooxygenase
CN . Cyclooxygenase
CN
     E.C. 1.14.99.1
CN
     Fatty acid cyclooxygenase
CN
     Gene TIS10 proteins
CN
     Peroxidase, prostaglandin hydroperoxide
CN
     PG synthetase
CN
     PGG/H synthase
CN
     PGG2 peroxidase
CN
     PGH synthase
CN
     PGH2 synthase
CN
     PGH2 synthetase
CN
     PGI2 cyclooxygenase
CN
     Prostaglandin cyclooxygenase
CN
     Prostaglandin endoperoxide G/H synthase
CN
     Prostaglandin endoperoxide H synthase
CN
     Prostaglandin endoperoxide synthase
CN
     Prostaglandin endoperoxide synthetase
CN
     Prostaglandin G/H synthase
CN
     Prostaglandin G2 peroxidase
    Prostaglandin G2/H2 synthase
CN
CN
    Prostaglandin H synthase
CN
    Prostaglandin H synthetase
CN
    Prostaglandin H2 synthase
CN
     Prostaglandin H2 synthetase
CN
     Prostaglandin hydroperoxidase
CN
     Prostaglandin hydroperoxide peroxidase
CN
     Prostaglandin peroxidase
CN
    Proteins, gene TIS10
CN
    TXA2 cyclooxygenase
DR
     59763-19-8, 64427-82-3, 69913-02-6
MF
    Unspecified
CI
    MAN
LC
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                ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
       CA, CAPLUS, CASREACT, CEN, CHEMCATS, CIN, EMBASE, NIOSHTIC, PROMT,
       TOXCENTER, USPAT2, USPATFULL
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
            7834 REFERENCES IN FILE CA (1962 TO DATE)
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            8: 138:20671
REFERENCE
            9:
               138:19889
REFERENCE 10: 138:19837
L112 ANSWER 17 OF 20 REGISTRY COPYRIGHT 2003 ACS
     9067-32-7 REGISTRY
     Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     Artz
CN
     Bio Hyaluro 12
CN
     FCH 200
CN
     FCH 248
CN
     HA-Q
CN
     HA-Q 1
CN
     Healon
CN
     Healon (polysaccharide)
CN
     Healon GV
ÇN
     Hyalart
CN
     Hyalein
CN
     Hyalgan
CN
     Hyladerm
CN
     Nidelon
CN
     NRD 101
CN
     Opegan
CN
     Orthovisc
CN
     SI 4402
CN
     SL 1010
CN
     SLM 10
CN
     Sodium hyaluronate
CN
     SPH
DR
     34448-35-6
MF
     Unspecified
CI
     PMS, COM, MAN
     Manual registration, Polyother, Polyother only
PCT
LC
                 ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS,
       BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN,
       CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA,
       MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, TOXCENTER, USAN, USPAT2,
         (*File contains numerically searchable property data)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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57 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

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            9:
                137:389246
REFERENCE
REFERENCE 10:
                137:389204
L112 ANSWER 18 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN
     9004-61-9 REGISTRY
CN
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     ACP
CN
     ACP (polysaccharide)
     ACP gel
CN
CN
     Durolane
CN
     Hyaluronan
CN
     Hylartil
CN
     Luronit
CN
     Mucoitin
CN
     Sepracoat
CN
     Synvisc
     9039-38-7, 37243-73-5, 29382-75-0
DR
MF
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CI
     PMS, COM, MAN
    Manual registration, Polyester, Polyester formed
PCT
     STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS,
LC
       BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGU,
       DRUGUPDATES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
       NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, TOXCENTER, USAN,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
                      DSL**, EINECS**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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```
CN
     GPR protease
     Growth-related proteinase
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
     9001-93-8, 9012-23-1, 9040-76-0, 125498-72-8, 125752-86-5, 123779-18-0,
DR
     124041-97-0, 120038-39-3, 120038-40-6, 105913-13-1, 118901-82-9,
     144906-30-9, 143404-30-2, 143404-41-5, 80804-52-0, 116267-38-0,
     117278-03-2, 117698-27-8, 118390-80-0
     Unspecified
MF
     COM, MAN
CI
                 ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
     STN Files:
LC
       CA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN,
       CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB,
       IPA, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PLASPEC*, PROMT, RTECS*,
       TOXCENTER, TULSA, USPAT2, USPATFULL, VTB
         (*File contains numerically searchable property data)
     Other Sources:
                      EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
           34479 REFERENCES IN FILE CA (1962 TO DATE)
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           34529 REFERENCES IN FILE CAPLUS (1962 TO DATE)
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REFERENCE
           9: 138:38474
REFERENCE 10: 138:38472
L112 ANSWER 20 OF 20 REGISTRY COPYRIGHT 2003 ACS
     9001-12-1 REGISTRY
     Collagenase (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
    Aspergillopeptidase C
CN
     Azocollase
CN
     Clostridiopeptidase A
CN
     Clostridiopeptidase I
CN
     Clostridiopeptidase II
CN
     Collagen peptidase
     Collagen protease
CN
CN
     Collagenase A
CN
    Collagenase MMP-1
CN
    E.C. 3.4.24.3
CN
    E.C. 3.4.24.34
CN
    E.C. 3.4.24.7
CN
    E.C. 3.4.4.19
CN
     E.C. 3.4.99.5
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CN

Interstitial collagenase

```
CN
     Kollaza
CN
     Liberase
     Liberase Blendzyme IV
     Matrix metalloprotase 1
     Matrix metalloprotease MMP-ABT
     Matrix metalloproteinase-1
     Matrix metalloproteinase-18
CN
     Matrix metalloproteinase-8
CN
     Metallocollagenase
CN
     Metalloproteinase-1
CN
     MMP-1
CN
     MMP-8
CN
CN
     Morikraz
CN
     Nucleolysin
CN
     Peptidase, clostridio-, A
CN
     Proteinase, Clostridium histolyticum, A
CN
     Soycollagestin
     37288-86-1, 39433-96-0
DR
MF
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CI
     COM, MAN
LC
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       CA, CABA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM,
       DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
       MRCK*, MSDS-OHS, PHAR, PIRA, PROMT, TOXCENTER, USPAT7, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
                      EINECS**, TSCA**
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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           9:
               138:35681
REFERENCE 10:
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=> fil embase
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FILE COVERS 1974 TO 16 Jan 2003 (20030116/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate

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substance identification.

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L133 ANSWER 1 OF 8 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
     2001370730 EMBASE
     A critique of the 2000 update of the American College of Rheumatology
     recommendations for management of hip and knee osteoarthritis [5].
ΑU
     Brandt K.D.; Hochberg M.C.
CS
     Dr. K.D. Brandt, Indiana Univ. School of Medicine, Indianapolis, IN,
     United States
     Arthritis and Rheumatism, (\cancel{k}001)) 44/10 (2451-2456).
SO
     ISSN: 0004-3591 CODEN: ARHEAN
CY
     United States
     Journal; Letter
DΤ
             Arthritis and Rheumatism
FS
     031
             Health Policy, Economics and Management
     036
     037
             Drug Literature Index
     038
             Adverse Reactions Titles
LA
    English
    Medical Descriptors:
CT
     *knee osteoarthritis: DM, disease management
     *knee osteoarthritis: DT, drug therapy
     *coxitis: DM, disease management
     *coxitis: DT, drug therapy
    medical society
    practice guideline
    drug contraindication
    drug safety
    drug efficacy
    drug cost
    evidence based medicine
    expert system
    medical literature
    peer review
    antiinflammatory activity
    analgesic activity
    drug induced disease: SI, side effect
    liver toxicity: SI, side effect
    drug overdose
    human
    clinical trial
    letter
    priority journal
    Drug Descriptors:
      hyaluronic acid: DT, drug therapy
      hyaluronic acid: AR, intraarticular drug administration
    opiate: AE, adverse drug reaction
    opiate: DT, drug therapy
    opiate: PE, pharmacoeconomics
    tramadol: AE, adverse drug reaction
    tramadol: DT, drug therapy
    tramadol: PE, pharmacoeconomics
    paracetamol: AE, adverse drug reaction
    paracetamol: CT, clinical trial
    paracetamol: CB, drug combination
    paracetamol: CM, drug comparison
    paracetamol: DO, drug dose
    paracetamol: DT, drug therapy
    paracetamol: TO, drug toxicity
    paracetamol: PE, pharmacoeconomics
    analgesic agent: AE, adverse drug reaction
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analgesic agent: CT, clinical trial

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analgesic agent: CB, drug combination
      analgesic agent: CM, drug comparison
      analgesic agent: DO, drug dose
      analgesic agent: DT, drug therapy
      analgesic agent: TO, drug toxicity
      analgesic agent: PE, pharmacoeconomics
      nonsteroid antiinflammatory agent: AE, adverse drug reaction
      nonsteroid antiinflammatory agent: CT, clinical trial
      nonsteroid antiinflammatory agent: CM, drug comparison
      nonsteroid antiinflammatory agent: DO, drug dose
      nonsteroid antiinflammatory agent: DT, drug therapy
     phenylbutazone: CM, drug comparison
     phenylbutazone: DT, drug therapy
      ibuprofen: CT, clinical trial
      ibuprofen: CM, drug comparison
      ibuprofen: DO, drug dose
      ibuprofen: DT, drug therapy
        celecoxib: AE, adverse drug reaction
        celecoxib: CT, clinical trial
        celecoxib: CB, drug combination
        celecoxib: DT, drug therapy
        rofecoxib: AE, adverse drug reaction
        rofecoxib: CT, clinical trial
        rofecoxib: DT, drug therapy
     acetylsalicylic acid: AE, adverse drug reaction
     acetylsalicylic acid: DO, drug dose
     acetylsalicylic acid: DT, drug therapy
        cyclooxygenase 2 inhibitor: AE, adverse drug reaction
       cyclooxygenase 2 inhibitor: CT, clinical trial cyclooxygenase 2 inhibitor: CB, drug combination
        cyclooxygenase 2 inhibitor: DT, drug therapy
     cyclooxygenase 1 inhibitor: AE, adverse drug reaction
     cyclooxygenase 1 inhibitor: DT, drug therapy
     warfarin: AE, adverse drug reaction
     warfarin: CB, drug combination
     warfarin: DT, drug therapy
     corticosteroid: DT, drug therapy corticosteroid: AR, intraarticular drug administration
     glucocorticoid: DT, drug therapy glucocorticoid: AR, intraarticular drug administration
     (hyaluronic acid) 31799-91-4,
     9004-61-9, 9067-32-7; (opiate) 53663-61-9, 8002-76-4, 8008-60-4; (tramadol) 27203-92-5, 36282-47-0; (paracetamol) 103-90-2;
     (phenylbutazone) 129-18-0, 50-33-9, 8054-70-4; (ibuprofen) 15687-27-1;
     (celecoxib) 169590-42-5; (rofecoxib) 162011-90-7, 186912-82-3;
     (acetylsalicylic acid) 493-53-8, 50-78-2, 53663-74-4, 53664-49-6, 63781-77-1; (warfarin) 129-06-6, 2610-86-8, 3324-63-8, 5543-58-8, 81-81-2
L133 ANSWER 2 OF 8 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
     2000335279 EMBASE
     'Horizons in Rheumatology' 2nd Annual CPD Update Thursday 16th March 2000
     Royal College of Pathologists, London.
     Dr. J. Dawson, Department of Rheumatology, University Hospital Aintree,
     Longmoor Lane, Liverpool L9 7AL, United Kingdom
     CPD Rheumatology, (2000) 1/3 (111-112). ISSN: 1367-8922 CODEN: CPDRFU
     United Kingdom
     Journal; Conference Article
     007
              Pediatrics and Pediatric Surgery
     037
              Drug Literature Index
     031
              Arthritis and Rheumatism
     038
              Adverse Reactions Titles
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052
             Toxicology
     017
             Public Health, Social Medicine and Epidemiology
     020
             Gerontology and Geriatrics
     010
             Obstetrics and Gynecology
     030
             PharmacologyGerontology and Geriatrics
     English
LA
CT
    Medical Descriptors:
     *arthritis: EP, epidemiology
     *arthritis: DT, drug therapy
     *arthritis: ET, etiology
     *arthritis: TH, therapy
     *arthritis: DI, diagnosis
     *arthritis: DR, drug resistance
     human
     clinical trial
     United Kingdom
     Paget bone disease: EP, epidemiology
     Paget bone disease: DT, drug therapy
    Paget bone disease: DR, drug resistance
    osteoarthritis: DI, diagnosis
    osteoarthritis: ET, etiology
    osteoarthritis: EP, epidemiology
    osteoarthritis: DT, drug therapy
    osteoarthritis: TH, therapy
    juvenile rheumatoid arthritis: DT, drug therapy
    risk factor
    prevalence
    rheumatic disease: TH, therapy
    rheumatic disease: DT, drug therapy
    conservative treatment
    rheumatoid arthritis: DT, drug therapy
    rheumatoid arthritis: TH, therapy
    pregnancy
    maternal disease: SI, side effect
    drug safety
    immune deficiency: SI, side effect
    thrombocytopenia: SI, side effect
    coxitis
    drug absorption
    newborn disease: SI, side effect
    conference paper
    Drug Descriptors:
      *antirheumatic agent: DT, drug therapy
      *antirheumatic agent: CM, drug comparison
      *antirheumatic agent: CB, drug combination
      *antirheumatic agent: TO, drug toxicity
      *antirheumatic agent: AR, intraarticular drug administration
      *antirheumatic agent: PD, pharmacology
      *antirheumatic agent: AE, adverse drug reaction
      *antirheumatic agent: CT, clinical trial
    ascorbic acid: DT, drug therapy
    bisphosphonic acid derivative: DT, drug therapy
    bisphosphonic acid derivative: PD, pharmacology
    alkaline phosphatase: EC, endogenous compound
    etidronic acid: DT, drug therapy
    calcitonin: DT, drug therapy
    nonsteroid antiinflammatory agent: DT, drug therapy
    nonsteroid antiinflammatory agent: CM, drug comparison
    paracetamol: DT, drug therapy
    paracetamol: CM, drug comparison
    capsaicin: DT, drug therapy
    capsaicin: CT, clinical trial
```

```
hyaluronic acid: DT, drug therapy
       hyaluronic acid: AR, intraarticular drug administration
       hyaluronic acid derivative: DT, drug therapy
       hyaluronic acid derivative: AR, intraarticular drug administration
     tiludronic acid: DT, drug therapy
     methotrexate: DT, drug therapy
     methotrexate: CM, drug comparison
     methotrexate: TO, drug toxicity
     methotrexate: CB, drug combination
     methotrexate: PK, pharmacokinetics
     tumor necrosis factor alpha antibody: DT, drug therapy
       etanercept: DT, drug therapy
       etanercept: CM, drug comparison
       etanercept: CT, clinical trial
       infliximab: DT, drug therapy
       infliximab: CM, drug comparison
     prednisolone: DT, drug therapy
     corticosteroid derivative: AE, adverse drug reaction
       hydroxychloroquine: DT, drug therapy
       azathioprine: DT, drug therapy
     salazosulfapyridine: DT, drug therapy
     salazosulfapyridine: AE, adverse drug reaction
     dipeptidyl carboxypeptidase inhibitor: DT, drug therapy
     dipeptidyl carboxypeptidase inhibitor: TO, drug toxicity
       leflunomide: DT, drug therapy
       leflunomide: CM, drug comparison
       leflunomide: CB, drug combination
       leflunomide: TO, drug toxicity
     (ascorbic acid) 134-03-2, 15421-15-5, 50-81-7; (alkaline phosphatase)
RN
     9001-78-9; (etidronic acid) 2809-21-4, 3794-83-0, 58449-82-4, 7414-83-7;
     (calcitonin) 12321-44-7, 21215-62-3, 9007-12-9; (paracetamol) 103-90-2;
     (capsaicin) 404-86-4; (hyaluronic acid)
     31799-91-4, 9004-61-9, 9067-32-7; (tiludronic
     acid) 96538-83-9; (methotrexate) 15475-56-6, 59-05-2, 7413-34-5;
     (etanercept) 185243-69-0, 200013-86-1; (infliximab) 170277-31-3;
     (prednisolone) 50-24-8; (hydroxychloroquine) 118-42-3, 525-31-5;
     (azathioprine) 446-86-6; (salazosulfapyridine) 599-79-1; (leflunomide)
     75706-12-6
CN
     Hyalgan
     synvisc
NP
L133 ANSWER 3 OF 8 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
     97287685 EMBASE
DN
     1997287685
ΤI
     Anti-inflammatory activity of superoxide dismutase conjugated with sodium
     hyaluronate.
     Sakurai K.; Miyazaki K.; Kodera Y.; Nishimura H.; Shingu M.; Inada Y.
ΑU
CS
     Y. Inada, Toin Human Science/Technology Centre, Dept. Materials
     Science/Technology, Toin University of Yokohama, 1614 Kurogane-cho,
     Aoba-ku, Yokohama 225, Japan
SO
     Glycoconjugate Journal, (1997) 14/6 (723-728).
     Refs: 32
     ISSN: 0282-0080 CODEN: GLJOEW
CY
    United Kingdom
DT
    Journal; Article
FS
    030
             Pharmacology
    031
            Arthritis and Rheumatism
             Drug Literature Index
LA
    English
SL
    English
AΒ
    Superoxide dismutase (SOD) from bovine erythrocytes was conjugated with
     sodium hyaluronate (HA) with a mean molecular weight of 106 to
    have greater anti-inflammatory activity in vivo. Amino groups of SOD were
```

of X

coupled with carboxyl groups in the hyaluronate molecule using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide. The HA-SOD conjugate was composed of 1.5 mol of SOD molecule per 1 mol of hyaluronate on the average, and retained 70% of the activity of unmodified SOD. The conjugate was essentially non-immunogenic in mice, and exhibited much higher anti-inflammatory activities than HA or SOD in models of inflammatory diseases such as ischemic oedema of the foot-pad in mice, carrageenin-induced pleurisy and adjuvant arthritis in rats. CTMedical Descriptors: \*adjuvant arthritis \*antiinflammatory activity \*inflammatory disease: DT, drug therapy animal cell animal experiment animal model article cattle controlled study drug safety enzyme activity enzyme binding enzyme isolation erythrocyte immune response intraarticular drug administration intraperitoneal drug administration intravenous drug administration mouse nonhuman priority journal Drug Descriptors: \*antiinflammatory agent: PD, pharmacology \*antiinflammatory agent: CB, drug combination \*antiinflammatory agent: AN, drug analysis \*antiinflammatory agent: CM, drug comparison \*antiinflammatory agent: DV, drug development \*antiinflammatory agent: DT, drug therapy \*glycoconjugate: PD, pharmacology \*glycoconjugate: DT, drug therapy \*glycoconjugate: AN, drug analysis \*hyaluronic acid: CB, drug combination \*hyaluronic acid: CM, drug comparison \*hyaluronic acid: PD, pharmacology \*superoxide dismutase: CB, drug combination \*superoxide dismutase: PD, pharmacology \*superoxide dismutase: DT, drug therapy \*superoxide dismutase: DO, drug dose \*superoxide dismutase: CM, drug comparison indometacin: CM, drug comparison indometacin: DT, drug therapy RN (hyaluronic acid) 31799-91-4, 9004-61-9, 9067-32-7; (superoxide dismutase) 37294-21-6, 9016-01-7, 9054-89-1; (indometacin) 53-86-1, 74252-25-8, 7681-54-1 Seikagaku (Japan); Sigma (United States) CO L133 ANSWER 4 OF 8 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. AN **97091232** EMBASE DN 1997091232 Efficacy of hyaluronic acid/nonsteroidal anti-inflammatory drug systems in preventing postsurgical tendon adhesions. ΑU Miller J.A.; Ferguson R.L.; Powers D.L.; Burns J.W.; Shalaby S.W.

ΤI

```
CS Dr. D.L. Powers, Department of Bioengineering, Clemson University, Clemson, SC 29634-0909, United States
SO Journal of Biomedical Materials Research, (1997) 38/1 (25-33).
```

Refs: 18

ISSN: 0021-9304 CODEN: JBMRBG CY United States

DT Journal; Article

FS 027 Biophysics, Bioengineering and Medical Instrumentation 033 Orthopedic Surgery

037 Drug Literature Index

LA English

SL English

AΒ Tendon adhesion is acknowledged to be a function of both an overwhelming inflammatory response at the surgical site and the loss of physical separation that is normally present between the tendons and the synovial sheath. Adhesions bind the flexor tendons to each other and to surrounding structures, interfering with their normal gliding function. The clinical result of adhesion formation following flexor tendon surgery is poor digital function. This study investigated the effect of intraoperative treatments of high viscosity absorbable gels made of various combinations of hyaluronic acid and nonsteroidal anti-inflammatory drugs, on adhesion formation in a leghorn chicken flexor tendon model. Forty-eight mature, white leghorn chickens were used to verify the surgical model and to test five different gel treatments. The gels were formed from: 2% sodium hyaluronate in phosphate buffered saline alone or combined with 1 mg/mL tolmetin sodium; 1 mg/mL naproxen sodium; 0.216 g/ml, calcium acetate; or 0.216 g/mL calcium acetate plus 1 mg/mL  $\,$ naproxen sodium. The gels were applied by injecting 0.2 mL of the specified composition into the intrasheath space near the conclusion of the surgical procedure. Gross and histological evaluations were conducted to analyze the efficacy. All of the treatments significant reduced the extent and severity of postsurgical tendon adhesion in this animal model as compared with the control (no gel treatment) (p < 0.05). The combination of naproxen sodium and calcium acetate in a high viscosity sodium hyaluronate carrier was the most effective composition. The combination of a high viscosity gel and nonsteroidal anti-inflammatory drugs appears to maintain the natural separation between the tendons and their sheaths and decrease the tissue inflammatory response through mediating two of the major stimuli in adhesion formation.

CT Medical Descriptors:

\*adhesion

\*drug delivery system

\*tendinitis: PC, prevention \*tendinitis: DT, drug therapy

\*tendinitis: CO, complication

animal model

antiinflammatory activity

article

chicken

controlled study

drug efficacy

flexor tendon

intramuscular drug administration

intraperitoneal drug administration

intravenous drug administration

nonhuman

postoperative complication

rat

tendon surgery

topical drug administration

Drug Descriptors:

\*calcium acetate: PR, pharmaceutics \*calcium acetate: DT, drug therapy

not inte

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*calcium acetate: CM, drug comparison
      *calcium acetate: CB, drug combination
      *calcium acetate: AD, drug administration
        *hyaluronic acid: AD, drug administration
        *hyaluronic acid: CB, drug combination
        *hyaluronic acid: CM, drug comparison
        *hyaluronic acid: DT, drug therapy
        *hyaluronic acid: PR, pharmaceutics
        *naproxen: CM, drug comparison
        *naproxen: PR, pharmaceutics
        *naproxen: DT, drug therapy
       *naproxen: AD, drug administration
       *naproxen: CB, drug combination
     *nonsteroid antiinflammatory agent: CB, drug combination
     *nonsteroid antiinflammatory agent: CM, drug comparison
     *nonsteroid antiinflammatory agent: DT, drug therapy
     *nonsteroid antiinflammatory agent: PR, pharmaceutics
     *nonsteroid antiinflammatory agent: AD, drug administration
     *tolmetin: PR, pharmaceutics
     *tolmetin: DT, drug therapy
     *tolmetin: CM, drug comparison
     *tolmetin: CB, drug combination
     *tolmetin: AD, drug administration
     ibuprofen: DO, drug dose
     ibuprofen: AD, drug administration
     ibuprofen: DT, drug therapy
RN
     (calcium acetate) 62-54-4; (hyaluronic acid)
     31799-91-4, 9004-61-9, 9067-32-7; (naproxen)
     22204-53-1, 26159-34-2; (tolmetin) 26171-23-3, 35711-34-3; (ibuprofen)
     15687-27-1
     Genzyme (United States); Rw johnson (United States); Sigma (United
     States); Baker (United States)
L133 ANSWER 5 OF 8 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
     94338422 EMBASE
DN
     1994338422
TI
     Review and evaluation of 3% diclofenac in hyaluronan (D.HA) gel.
ΑU
     Russell A.L.; Fraser R.; Willoughby D.; Tomlinson A.; Falk R.E.
     Academy of Pain Management, 18 Kensington Road, Bramalea, Ont. L6T 4S5,
CS
     Canada
SO
     Round Table Series - Royal Society of Medicine, (1994) -/33 (64-71).
     ISSN: 0268-3091 CODEN: RTSSES
CY
     United Kingdom
DT
     Journal; Conference Article
FS
             Neurology and Neurosurgery
     030
             Pharmacology
     037
             Drug Literature Index
LA
     English
     English
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whole

SL English

1. D.HA has a unique analgesic action distal from the site of inflammation. 2. Consideration should be given in further trials to extending the age group limit to 75 to cover the cases where topical agents will be most useful. 3. Possible evaluation and double blind study for treatment of thrombophlebitis should be undertaken in an older age group who are at higher risk from oral NSAIDs. 4. Capsaicin should be scientifically evaluated as a test bed for rapid inexpensive evaluation of D.HA, and seems to be ideal for comparison with other NSAIDs. Further work is needed in a university laboratory setting. 5. With the ever-increasing epidemic of myofascial and fibromyalgia, thought should be given to evaluating treatment in this field. In summary, HA in combination with an NSAID will induce local analgesia, and distant analgesia in deeper structures beyond the range of initial diffusion. Can this be explained by an axon reflex? Comments would be appreciated.

```
CT
      Medical Descriptors:
      *analgesia
      antiinflammatory activity
      clinical trial
      conference paper
      drug formulation
      drug mechanism
      fibromyalgia: DT, drug therapy
      inflammation: DT, drug therapy
      meta analysis
      myofascial pain: DT, drug therapy
      nerve ending
      nerve fiber
      nerve stimulation
      neuritis: DT, drug therapy
      nonhuman
      osteoarthritis: DT, drug therapy
      pain: DT, drug therapy
      patient compliance
      soft tissue injury: DT, drug therapy
      thermography
      thrombophlebitis: DT, drug therapy
      tooth extraction
      topical drug administration
     ulcer: DT, drug therapy
      Drug Descriptors:
      *diclofenac: CM, drug comparison
      *diclofenac: DT, drug therapy
      *diclofenac: PR, pharmaceutics
      *diclofenac: PD, pharmacology
     *diclofenac: CT, clinical trial
     antibiotic agent: DT, drug therapy
     antibiotic agent: CB, drug combination
     capsaicin
       hyaluronic acid: CB, drug combination
       hyaluronic acid: DT, drug therapy
     nonsteroid antiinflammatory agent: CM, drug comparison
       piroxicam: CT, clinical trial
       piroxicam: CB, drug combination
piroxicam: DT, drug therapy
     substance p: EC, endogenous compound
     (diclofenac) 15307-79-6, 15307-86-5; (capsaicin) 404-86-4; (
RN
     hyaluronic acid) 31799-91-4, 9004-61-9
      9067-32-7; (piroxicam) 36322-90-4; (substance p) 33507-63-0
CO
     Pfizer (Indonesia)
L133 ANSWER 6 OF 8 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
     94035278 EMBASE
     1994035278
DN
TΙ
     The effects of orally administered calcium pentosan polysulfate on
     inflammation and cartilage degradation produced in rabbit joints by
     intraarticular injection of a hyaluronate-polylysine complex.
     Smith M.M.; Ghosh P.; Numata Y.; Bansal M.K.
ΑU
     Raymond Purves Bone/Joint Res. Lab., Royal North Shore Hospital of
CS
     Sydney, St. Leonards, NSW 2065, Australia
     Arthritis and Rheumatism, (1994) 37/1 (125-136).
SO
     ISSN: 0004-3591
                      CODEN: ARHEAW
CY
     United States
DΤ
     Journal; Article
FS
     031
             Arthritis and Rheumatism
     037
             Drug Literature Index
LA
     English
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 $\operatorname{SL}$ English

Objective. To determine the antiinflammatory and cartilage-protecting AB activities of orally administered calcium pentosan polysulfate (CaPPS) in a rabbit model of inflammatory arthritis. Methods. A single intraarticular injection of a preformed polycation complex (PC) of poly-D-lysine and hyaluronan was used to induce joint inflammation; saline was injected into the contralateral joint as a control. Animals were killed 1, 4, 7, or 10 days post-PC injection. CaPPS, at 5 mg/kg, 10 mg/kg, or 75 mg/kg, was given every 48 hours commencing 7 days prior to PC injection. Serum interleukin-6 (IL- 6), synovial fluid (SF) prostaglandin E2, cell numbers, and cartilage proteoglycan (PG) content, composition, and biosynthesis were determined for PC- and saline-injected joints. Results. In PC-injected, non-drug-treated animals, serum IL-6 activity, SF leukocyte numbers, and prostaglandin E2 levels were elevated, while cartilage PG content and biosynthesis were reduced. CaPPS at 10 mg/kg, but not at 5 mg/kg, decreased serum IL-6 levels but maintained cartilage PG concentration and biosynthesis. However, SF leukocyte counts and prostaglandin E2 levels (except on day 1) were not reduced. Conclusion. The ability of CaPPS to attenuate serum IL-6 levels and preserve cartilage PGs in inflamed rabbit joints suggests that this substance could be of value as an effective orally administered chondroprotective, antiarthritic drug. Medical Descriptors:

CT

\*cartilage degeneration

\*osteoarthritis

\*rheumatoid arthritis

animal experiment

animal model

article

controlled study

dose response

drug efficacy

drug mixture

nonhuman

priority journal

protein content

rabbit

synovial fluid

Drug Descriptors:

\*calcium: CB, drug combination

\*calcium: DO, drug dose .

\*calcium: PD, pharmacology

\*hyaluronic acid: CB, drug combination

\*hyaluronic acid: PD, pharmacology

\*pentosan polysulfate: CB, drug combination

\*pentosan polysulfate: DO, drug dose

\*pentosan polysulfate: PD, pharmacology

\*polylysine: CB, drug combination

\*polylysine: PD, pharmacology

interleukin 6: EC, endogenous compound

prostaglandin e2: EC, endogenous compound

proteoglycan: EC, endogenous compound

(calcium) 7440-70-2; (hyaluronic acid)

31799-91-4, 9004-61-9, 9067-32-7; (pentosan

polysulfate) 116001-96-8, 37300-21-3, 37319-17-8; (polylysine) 25104-18-1, 25988-63-0, 33960-24-6, 38000-06-5, 73565-56-7; (prostaglandin e2)

363-24-6

L133 ANSWER 7 OF 8 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ΑN **93196741** EMBASE

DN 1993196741

RN

ΤI Animal models of early osteoarthritis: Their use for the evaluation of potent chondroprotective agents.

```
Ghosh P.; Armstrong S.; Read R.; Numata Y.; Smith S.; McNair P.; Marshall
 ΑU
      Raymond Purves Research Laboratories, University of Sydney, Royal North
 CS
      Shore Hospital of Sydney, St Leonards, NSW 2065, Australia
      Agents and Actions, (1993) 39/SUPPL. (195-206).
 SO
      ISSN: 0065-4299 CODEN: AGACBH
 CY
      Switzerland
      Journal; Conference Article
 FS
             Pharmacology
              Arthritis and Rheumatism
      037
              Drug Literature Index
 LA
     English
     English
 AΒ
     Medial meniscectomy was undertaken in adult merino sheep and after 16
     weeks exercise each group was administered five weekly intra-articular
     injections of saline, pentosan polysulphate (PPS), hyaluronic
     acid (HA) or a combination of PPS + HA. Gait analysis and x-rays
     were undertaken before and after drug treatment. At sacrifice (26 weeks),
     joints were examined for gross pathological and histochemical changes.
     Only the PPS-treated group showed an improvement in gait, with low
     radiological and histology scores. The HA-treated group showed similar but
     less significant changes to these parameters.
CT
     Medical Descriptors:
     *drug screening
     *osteoarthritis: PC, prevention
     animal experiment
     animal model
     conference paper
     controlled study
     exercise
     gait
     histochemistry
     meniscectomy
     nonhuman
     pathology
     priority journal
     sheep
     X ray
     Drug Descriptors:
     *protective agent: CB, drug combination
     *protective agent: CM, drug comparison
       hyaluronic acid: CB, drug combination
       hyaluronic acid: CM, drug comparison
       pentosan polysulfate: CB, drug combination
       pentosan polysulfate: CM, drug comparison
RN
     (hyaluronic acid) 31799-91-4,
     9004-61-9, 9067-32-7; (pentosan polysulfate)
     116001-96-8, 37300-21-3, 37319-17-8
CN
     (1) Artz; Cartrophen
     (1) Seikayaku (Japan)
CO
L133 ANSWER 8 OF 8 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN
     91244798 EMBASE
DN
     1991244798
     [Comparison between the bioavailability of two topical formulas of
ΤI
     piroxicam in the presence and absence of thiomucase].
     BIODISPONIBILIDADE COMPARADA DE DUAS FORMULACOES DE APLICACAO CUTANEA DE
     PRIOXICAM NA PRESENCA E AUSENCIA DE TIOMUCASE.
ΑU
    Maya M.; Morais J.; Ruas da Silva J.
CS
    Centro de Metabolismos e Genetica, Universidade de Lisboa, Lisboa,
     Portugal
    Revista Portuguesa de Farmacia, (1991) 41/2 (33-41).
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CODEN: RPTFAU

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CY
      Portugal
 DT
      Journal; Article
 FS
      037
              Drug Literature Index
 LA
      Portuguese
 SL
      English
      Medical Descriptors:
      *drug absorption
      *drug bioavailability
      *drug formulation
      *drug penetration
      *skin permeability
      adult
      article
      drug blood level
      drug determination
      drug structure
      high performance liquid chromatography
      human
      human experiment
      male
      normal human
      topical drug administration
      Drug Descriptors:
      *enzyme
        *piroxicam: PK, pharmacokinetics
        *piroxicam: CB, drug combination
        *piroxicam: AN, drug analysis
        *hyaluronidase: CB, drug combination
      (piroxicam) 36322-90-4; (hyaluronidase) 9001-54-1,
RN
     9055-18-9
=> e antirheumatic agent+all/ct
E1
              0
                  BT3
                        Chemicals and drugs/CT
E2
              1
                   BT2
                         analgesic, antiinflammatory, antirheumatic and
                         antigout agents/CT
F.3
         12170
                    BT1
                          antiinflammatory agent/CT
E4
          3424
                     -->
                           antirheumatic agent/CT
E5
        105421
                     MN
                           D14.30.40./CT
                      HNTE Creation date 01 JUL 19: 79
E6
             0
                      UF
                            antiarthritic agent/CT
E7
             0
                      UF
                            antirheumatic/CT
E8
             0
                      UF
                            antirheumatic agents/CT
E9
             0
                      UF
                            antirheumatic agents, gold/CT
E10
             0
                      UF
                            antirheumatic drug/CT
E11
            28
                      NXT
                            (10 methoxy 4h benzo(4,5)cyclohepta(1,2 b)thiophen
                            4 ylidene)acetic acid/CT
E12
             6
                      NXT
                            2 (4 chlorophenyl) 4,5 diphenyl 2 imidazoline/CT
E13
                            3 (3,5 di tert butyl 4 hydroxybenzylidene) 1
            21
                      NXT
                            methoxy 2 pyrrolidinone/CT
E14
             2
                      NXT
                            3 (4 methylbenzoyl) 2 (methylthiomethyl)propionic
                            acid/CT
E15
            18
                      NXT
                            3 aurothio 2 hydroxy 1 propanesulfonate calcium/CT
                            3 formamido 7 methanesulfonamido 6
E16
            29
                      NXT
                            phenoxychromone/CT
E17
             9
                            3,7 dimethyl 9 (2 nonyloxy 6
                     TXN
                            (trifluoromethyl)phenyl) 2,4,6,8 nonatetraenoic
                            acid/CT
E18
             4
                     NXT
                            3,7 dimethyl 9 (2 nonyloxyphenyl) 2,4,6,8
                            nonatetraenoic acid/CT
E19
                            4 (1 (2 fluoro 4 biphenylyl)ethyl) 2
            12
                     NXT
                            methylaminothiazole/CT
E20
             7
                     NXT
                            4 (3,4 dimethoxyphenyl) 6,7 dimethoxy 2 (1,2,4
```

triazol 1 ylmethyl) 3 quinolinecarboxylic acid ethyl ester/CT E21 31 NXT 4 (3,5 di tert butyl 4 hydroxyphenyl) 2 methyl 1,2 oxazin 3 one/CT E22 35 TXNacetylsalicylate copper/CT E23 183 NXTacetylsalicylic acid calcium/CT E24 61 TXNactarit/CT E25 37 NXT adalimumab/CT E26 233 NXTallochrysine/CT E27 57 NXT amiprilose/CT E28 68 NXTanacin/CT E29 140 NXT arthrotec/CT E30 2 NXT atiprimod/CT 1619 E31 TXNauranofin/CT E32 1030 TXN aurothioglucose/CT E33 2363 NXTaurothiomalate/CT E34 961 TXNazapropazone/CT E35 31392 NXTazathioprine/CT E36 721 TXNbenzydamine/CT E37 270 NXTbucillamine/CT E38 178 NXTbumadizone/CT E39 34 NXTbutibufen/CT E40 1825 NXTcelecoxib/CT E41 14261 NXTchloroquine/CT E42 95 TXNchondroprotective agent/CT E43 113 NXTcinchophen/CT E44 77 NXTclobuzarit/CT E45 249 TXNclometacin/CT E46 727 NXTcolloidal gold/CT E47 22 TXN cph 82/CT E48 153 TXNdeethylchloroquine/CT E49 52 TXN dexketoprofen/CT E50 147 NXT diacetylrhein/CT E51 30 NXT efalizumab/CT E52 5 TXNendolac/CT E53 12 TXNesonarimod/CT E54 1016 TXN etanercept/CT E55 207 TXNetofenamate/CT E56 2195 NXT formic acid/CT E57 49 galactosaminoglucuronoglycan sulfate/CT NXT E58 205 NXT glucosamine sulfate/CT E59 45 TXNglucuronylglucosaminoglycan/CT E60 190 TXNglycosaminoglycan peptide/CT E61 813 glycosaminoglycan polysulfate/CT NXTE62 4259 TXNhydroxychloroquine/CT E63 133 NXThydroxychloroquine sulfate/CT E64 1427 NXT infliximab/CT 279 E65 NXTisoxicam/CT E66 93 NXT keratinate gold/CT E67 5119 NXTketoprofen/CT E68 51 NXT ketoprofen lysine/CT E69 1153 NXT leflunomide/CT E70 72 TXNlenercept/CT E71 6 NXTlicofelone/CT E72 165 TXNlobenzarit/CT E73 56 lonazolac calcium/CT NXT E74 124 NXT lornoxicam/CT E75 2 NXT lumiracoxib/CT E76 70 NXT magnesium salicylate/CT E77 1046 TXNmelittin/CT E78 189 . NXTn acetylpenicillamine/CT E79 969 TXNnabumetone/CT E80 10212 NXT naproxen/CT

E81	8	NXT	neurofenac/CT
E82	1213	NXT	niflumic acid/CT
E83	79	NXT	om 89/CT
E84	688	NXT	osmium tetraoxide/CT
E85	86	NXT	oxaceprol/CT
E86	11027	NXT	penicillamine/CT
E87	907	NXT	pentosan polysulfate/CT
E88	54	NXT	piascledine/CT
E89	5910	NXT	piroxicam/CT
E90	103	NXT	piroxicam beta cyclodextrin/CT
E91	5	NXT	pralnacasan/CT
E92	14	NXT	prinomide/CT
E93	10	NXT	prinomide triethanolamine/CT
E94	241	NXT	rhein/CT
E95	16	ТХИ	rheumajecta/CT
E96	98	NXT	rimexolone/CT
E97	1395	NXT	rofecoxib/CT
E98	26	NXT	s adenosylmethionine tosylate sulfate/CT
E99	248	NXT	sodium aurothiosulfate/CT
E100	3538	NXT	sulindac/CT
E101	190	NXT	sulindac sulfide/CT
E102	16299	NXT	superoxide dismutase/CT
E103	272	TXN	tenidap/CT
E104	59	NXT	tepoxalin/CT
E105	44	NXT	teriflunomide/CT
E106	48	NXT	thurfyl nicotinate/CT
E107	966	NXT	tiaprofenic acid/CT
E108	34	NXT	tilomisole/CT
E109	55	NXT	timegadine/CT
E110	416	NXT	tolfenamic acid/CT
E111	27	NXT	tropesin/CT
E112	39	NXT	vasolastine/CT
E113	3	NXT	zinc chelated pentosan polysulfate/CT
E114	3	NXT	zinc glycerolate/CT
*****	* END***		

=> fil wpix

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 L169 ANSWER 1 OF 6 WPIX (C) 2003 THOMSON DERWENT
      2002-537443 [57]
                         WPIX
 DNC C2002-152395
      New hydroxamic acid compounds containing hyaluronic acid
      are matrix metalloproteinase inhibitors for
      treating arthritis.
 DC
      B02 B05
      IKEYA, H; MORIKAWA, T; OKAMACHI, A; TAKAHASHI, K; TAMURA,
 IN
 PA
      (CHUS) CHUGAI SEIYAKU KK; (ELED) DENKI KAGAKU KOGYO KK
 CYC
 PΙ
      WO 2002044218 A1 20020606 (200257) * JA
                                                      C08B037-08
                                               39p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
             NL OA PT SD SE SL SZ TR TZ UG ZM ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
             DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
             KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
             RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
     AU 2002018512 A 20020611 (200264)
                                                      C08B037-08
                                                                       <--
     WO 2002044218 A1 WO 2001-JP10493 20011130; AU 2002018512 A AU 2002-18512
ADT
     20011130
FDT AU 2002018512 A Based on WO 200244218
PRAI JP 2000-363993
                       20001130
     ICM C08B037-08
     ICS A61K031-728; A61P019-02; A61P029-00
AB
     WO 200244218 A UPAB: 20021031
     NOVELTY - Hydroxamic derivatives (I) are new.
          DETAILED DESCRIPTION - Hydroxamic derivatives of formula (I) are new.
          R1 = H, OH, 1-8C alkyl, 1-8C alkoxy or 2-8C alkenyl;
          R2, R3 = 1-8C alkyl (optionally substituted by 3-10C cycloalkyl or
     optionally substituted 6-14C aryl); or
     R1+R3 = ring.
          R4 = H \text{ or } 1-4C \text{ alkyl};
        = R7 - R8 - R9;
          R7 = 1-8C alkylene;
          R8 = O or CH2 or NH both optionally substituted by 1-4C alkyl;
          R9 = 1-10C alkylene optionally interrupted by O; and
          R6 = H or 1-4C alkyl.
          ACTIVITY - Antiarthritic; Antirheumatic; Osteopathic.
          In an in vitro collagen induced arthritis model using rabbit femurs a
     compound of formula (Ia) had an IC50 value of 100 micro g/ml.
          MECHANISM OF ACTION - Matrix-Metalloproteinase-
     Inhibitor
          USE - As matrix metalloproteinase
     inhibitors for treating and preventing arthritic diseases such as
     rheumatoid arthritis and osteoarthritis.
     Dwg.0/0
FS
     CPI
FΑ
     AB; GI; DCN
MC.
     CPI: B04-C02D; B14-C06; B14-C09; B14-D07C
TECH
                    UPTX: 20020906
    TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: (I) are prepared by
     reacting an amino compound of formula (IX) with N-hydroxy-5-norbornene-2,3-
     dicarboximide and hyaluronic acid.
```

R14 = amino protecting group. **ABEX** SPECIFIC COMPOUNDS - Five compounds (I) are specifically claimed e.g. HA = hyaluronic acid its derivative or salt attached via a hydroxyl group. ADMINISTRATION - Dosage is 0.01-100 (preferably 0.1-10) mg/kg/day by injection. EXAMPLE - Pyridine (1.2 ml), 1N hydrochloric acid (12 ml) in water (46.8 ml), N-hydroxy-5-norbornene-2,3-dicarboximide (1.068 g) and 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride (1.152 g) were added to sodium hyaluronate (600 mg; weight average molecular weight = 2200000) in water (60 ml). The mixture was stirred overnight at 40 degrees C and worked up. 0.1N Sodium hydroxide (20 ml) was added to an aqueous solution of N'-(13-amino-4,7,10-trioxatridecanyl)-N-(3S-hydroxy-4-(N-(1-methylethoxy)amino)-2R-isobutylsuccinyl)-L-t-leucinamide (25 mM; 20)ml) and the above hyaluronic acid product and the mixture was reacted at 4 degrees C for 22 hours. Work-up gave a compound of formula (Ia). L169 ANSWER 2 OF 6 WPIX (C) 2003 THOMSON DERWENT AN **2002-257275** [30] WPIX DNC **C2002-076529** New cationic matrix metalloprotease inhibitors for treating arthritis. DC IN HAYASHI, Y; NAKAMURA, T; OKAMACHI, A; TAMURA, T PΑ (CHUS) CHUGAI SEIYAKU KK CYC PΙ WO 2002006227 A1 (2002012) (200230) \* JA 90p C07D209-20 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW AU 2001071068 A 20020130 (200236) C07D209-20 WO 2002006227 A1 WO 2001-JP6172 20010717; AU 2001071068 A AU 2001-71068 ADT 20010717 FDT AU 2001071068 A Based on WO 200206227 PRAI JP 2000-398635 20001227; JP 2000-216790 20000718 IC ICM C07D209-20 A61K031-405; A61K038-05; A61K038-06; A61K038-07; A61P019-02; ICS A61P029-00; A61P043-00 AB WO 200206227 A UPAB: 20020513 NOVELTY - Cationic matrix metalloprotease inhibitors and theirs salts are new. ACTIVITY - Antiarthritic; Osteopathic; Antirheumatic. MECHANISM OF ACTION - Matrix-Metallo-Proteinase-Inhibitor USE - As matrix metalloprotease inhibitors for treating and preventing arthritis including osteoarthritis and rheumatoid arthritis. ADVANTAGE - Have improved retention at affected part of body thus have improved activity and reduced side effects. Dwg.0/10 FS CPI FA AB; DCN MC CPI: B06-H; B07-H; B10-A09B; B10-A10; B10-A17; B10-A18; B14-C09A; B14-C09B

UPTX: 20020513

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - More Specifically: Cationic

TECH

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matrix metalloprotease inhibitor comprises a
     hydroxamic group (preferably of formula (I) optionally attached via a
     spacer R7R8R9R10) and is especially a hyaluronic acid
     or its derivative.
     R1 = H, OH, A, OA, 2-8C alkenyl, (CH2)mNR5R6 or CH2SOnB;
     A = 1-8C \text{ alkyl};
     R5, R6 = H, A (optionally substituted by Cyc) or acyl; or
     NR5R6 = ring;
     m = 0-4;
     B = H, Cyc or A (optionally substituted by Cyc);
     Cyc = cycloalkyl, aryl or heterocyclyl);
     n = 0-2;
     R2, R3 = A (optionally substituted by Cyc);
     R4 = H \text{ or } 1-4C \text{ alkyl; or }
     R1+R3 = ring;
     R7 = 1-8C \text{ alkylene};
     R8 = CH2 (optionally substituted by 1-4C alkyl), O or NH;
     R9 = 1-10C alkylene optionally interrupted by 1-3 O;
     R10 = 0, S or NR11;
     R11 = H \text{ or } 1-4C \text{ alkyl.}
     Preparation: Compounds are prepared by introducing cationic groups into
     the matrix metalloprotease inhibitors.
ABEX
     ADMINISTRATION - Dosage is 0.01-100 (preferably 0.1-10) mg/kg/day by
     injection. Administration may also be orally, systemically or topically.
     EXAMPLE - Nalpha, approximatelyo1, approximatelyo2-tris(benzyloxycarbonyl)-D-
     arginine (0.86 g) then 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide
     hydrochloric acid salt were added to N-(4-(N-benzyloxyamino)-2-
     isobutylsuccinyl)-L-tryptophan-N-(13-amino)-4,7,10-trioxa-tridecanyl)
     amide (1.0 \text{ g}) in dichloromethane (10 \text{ ml}) and the mixture was stirred fo 16
     hours at room temperature. Work-up including silica gel chromatography
     (chlorofrom/methanol) gave 0.62 g (33.7%) of product. The product(0.48 g)
     was deprotected using palladium charcoal and hydrogen to give 0.25 \ensuremath{\text{g}}
     (86.2%) of N-(4-(N-hydroxyamino)-2-isobutylsuccinyl)-L-tryptophan-N-(13-N-D-
     arginylamino-4,7,10-trioxa-tridecanyl)amide.
L169 ANSWER 3 OF 6 WPIX (C) 2003 THOMSON DERWENT
     2001-586154 [66]
                        WPIX
DNC C2001-173702
     New composition for matrix metalloproteinase
     inhibitor comprises hyaluronic acid
     polysulfate or dermatan polysulfate.
     B04
     (MARU-N) MARUHO KK
CYC 1
     JP 2001163789 A 20010619 (200166)*
                                                6p
                                                      A61K031-728
                                                                       <--
ADT JP 2001163789 A J<del>P 19</del>99-353028 19991213
PRAI JP 1999-353028
                      19991213
     ICM A61K031-728
     ICS A61K031-737; A61P017-00; A61P027-02; A61P043-00
ICA C08B037-00; C08B037-08
     JP2001163789 A UPAB: 20011113
     NOVELTY - New composition for matrix metalloproteinase
     (MMP) inhibitor comprises at least one substance selected from
     hyaluronic acid polysulfate, dermatan polysulfate or
     their salts.
          ACTIVITY - Antiinflammatory; dermatological; cytostatic;
     ophthalmological; antiulcer.
          No biological data given.
          MECHANISM OF ACTION - MMP (matrix metalloproteinase
          To fluorescence labeled substrate solution was added MMP-3 derived
```

ΑN

TΙ

DC

PA

from human ulcerative cells to carry our enzyme reaction, and fluorescent intensity (520 nm) of the substrate decomposed product (erected wavelength: 495 nm) was measured. Hyaluronic acid polysulfate and dermatan polysulfate were added to the reaction solution, adjusting at 10-7 M respectively, and MMP-3 inhibitory activity of each sample was evaluated. The results showed that hyaluronic acid polysulfate (10-7 M concentration) inhibited MMP-3 activity by 20 % and dermatan polysulfate did by 50 %. USE - The composition is for the prevention or treatment of various diseases accompanied by decomposition of extracellular matrix. Various diseases are dermal disorder such as injury; or ulcerative, bullosus, granulomatous and lichenoid dermatitis; or eye disorder such as corneal ulcer and retinopathy. Injury or ulcerative dermatitis is wound, burn, chronic ulcer, decubital ulcer, pyogenic granuloma or dermal disorder caused by sunshine. Bullosus, granulomatous or lichenoid dermal disorder is pemphigus, porphyria cutanea tarda, epidermolysis bullosa dystrophica, epidermolysis bullosa hereditaria simplex, dermatitis herpetiformis, erysipelas, pompholyx, granuloma annulare, necrobiosis lipoidica diabeticorum or lichen planus (all claimed). The composition is used as MMP inhibitor, and effective for the prevention and treatment of inflammatory disorder, dermal disorder, cancer, circulatory disorder, eye disorder or nerve inflammatory disorder. ADVANTAGE - The compound is safe and has a different structure from the conventional MMP inhibitors. Dwg.0/1 CPI AB; DCN CPI: B04-C02E; B04-C02E1; B14-C03; B14-D07C; B14-E08; B14-F02; B14-H01; B14-J01; B14-N03; B14-N17; B14-N17A; B14-N17B; B14-N17C L169 ANSWER 4 OF 6 WPIX (C) 2003 THOMSON DERWENT 1999-542703 [46] WPIX DNN N1999-402500 DNC C1999-158533 Wound dressing comprising carrier with covalently bonded substances for removal of factors present in wound exudate which disturb healing. A96 B04 B07 D16 D22 P32 P34 EICHNER, W; ETTNER, N; MEYER-INGOLD, W; SCHINK, M; MEYEROLD, W (BEIE) BEIERSDORF AG; (EICH-I) EICHNER W; (ETTN-I) ETTNER N; (MEYE-I) MEYEROLD W; (SCHI-I) SCHINK M 27 EP 945144 A2 19990929 (199946) \* DE 21p A61L015-42 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI Al 19991007 (199947) DE 19813663 A61L015-42 AU 9921334 Α 19991007 (199954) A61L015-38 A US 6156334 20001205 (200066) A61F013-00 US 2002018802 A1 20020214 (200214) A61K039-395 US 2002197257 A1 20021226 (200304) A61K039-395 EP 945144 A2 EP 1999-250092 19990326; DE 19813663 A1 DE 1998-19813663 19980327; AU 9921334 A AU 1999-21334 19990322; US 6156334 A US 1999-276687 19990326; US 2002018802 Al Div ex US 1999-276687 19990326, Cont of US 2000-675253 20000929, US 2001-932926 20010821; US 2002197257 A1 Div ex US 1999-276687 19990326, Cont of US 2000-675253 20000929, Cont of US 2001-932926 20010821, US 2002-150015 20020520 US 2002018802 Al Div ex US 6156334; US 2002197257 Al Div ex US 6156334 PRAI DE 1998-19813663 19980327 ICM A61F013-00; A61K039-395; A61L015-38; A61L015-42 A01N025-00; A61K009-14; A61K009-70; A61K038-43; A61K047-30; ICS A61L015-40; A61L015-44 945144 A UPAB: 19991207 NOVELTY - A carrier-based wound dressing supports covalently bonded substances which interact with and remove factors present in the wound

exudate which prevent or slow wound healing.

FS

FΑ

DC

ΙN

PΑ

CYC

PΙ

AB

DETAILED DESCRIPTION - A wound dressing comprises a carrier and substances which are covalently bonded to the carrier and which interact by binding, complexing, chelating or chemically reacting with factors comprising suspended cells, cell fragments and dissolved components which are present in the wound exudate and which prevent wound healing.

An INDEPENDENT CLAIM is also included for the preparation of the wound dressing.

USE - Especially for the treatment of chronic, i.e. severe or non-healing, wounds.

ADVANTAGE - The wound dressing is more effective when used on chronic wounds than conventional dressings, e.g. moist dressings (see Nature 1962; 193:293 and Wound Rep. Reg. 1994; 2:202) and Sorbact (RTM: stearic acid coupled to a hydrophobised cellulose dressing). Dwg.0/4

FS CPI GMPI

FA AB; DCN

MC CPI: A12-V03A; B04-B04C; B04-C02A; B04-C02D; B04-C02E; B04-C02F; B04-C03B;

B04-C03D; B04-H06; B04-L01; B04-N04; B07-D04C; B10-A18; B14-D07C;

B14-N17B; D05-A01A1; D05-A01A2; D05-A01B1; D05-H10; D09-C04B UPTX: 19991110

TECH

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preparation: The wound dressing is prepared by reacting the substances which interact with the problem factors present in the exudate with the carrier material. Preferred Dressing: The dressing is a bandage, compress, wadding, plaster, foil, film, hydrocolloid bandage or gel. It can contain substances which promote wound healing, especially growth factors, and can also be water absorbent. Preferred Carrier: The carrier is a natural or synthetic polymer, especially cellulose or a cellulose derivative or an alginate, hyaluronic acid, chitin, chitosan, polysaccharide, polyamide, polyester, polyolefin, polyacrylate, polyvinyl alcohol, polyurethane or silicone, alone or as a mixture or copolymer. Preferred Covalently Bonded Substances: These substances are especially antigens, chelators, enzyme inhibitors, enzymes, enzyme mimetics, peptides and other proteins, which can interact with especially antigens, radicals, ions, proteins, peptides, lipids and free fatty acids. The substance can be a chelator, e.g. desferrioxamine, diethylenetriaminepentaacetic acid, N, N'-bis-(o-hydroxybenzyl)-ethylenediamine-N, N'-diacetic acid, 1, 2-dimethyl-3-hydroxypyrid-4-one or 1,2-dimethyl-3-hydroxy-3-hydroxypyridin-4-one, for interaction with ions, especially desferrioxamine for interaction with Fe(III) ions. Alternatively, the substance can be a radical scavenger, e.g. superoxide dismutase, catalase, glutathione peroxidase, myeloperoxidase and/or an enzyme mimic for interaction with reactive oxygen atoms. Further, when the problem factor in the exudate is a protease, the covalently bonded substance can be a protease inhibitor,

especially antipain, leupeptin, cystain, disopropyl fluorophosphate, 4-(2-aminoethyl)-phenylsulphonyl fluoride, phenylmethanesulphonyl fluoride, a natural proteinogenic matrix

metalloproteinase inhibitor, aprotinin, alpha-2-antiplasmin, alpha-2-macroglobulin, alpha-1-antichymotripsin, soya bean trypsin inhibitor or alpha-1-protease inhibitor.

ABEX

EXAMPLE - A cotton bandage (5 g) was boiled in bicarbonate buffer (100 mM) for 0.5 hour, rinsed (H2O; 2 l), air-dried, dehydrated (acetone), vacuum dried, activated with 1,1'-carbonyldiimidazole (5 g; freshly prepared in acetone (500 ml)) for 1 hour under reflux and then washed (acetone). Desferrioxamine mesylate (3.28 g) was dissolved in bicarbonate buffer (500 ml; 100 mM; pH 8.5) and pumped in countercurrent for 18 hours through a column containing the activated bandage. The resulting cellulose/desferrioxamine bandage is washed (bicarbonate buffer) an air-dried. In a test for iron uptake, the cellulose/desferrioxamine bandage obtained took up 38 mumol/g (32%) of the iron provided, while an

untreated cellulose bandage and a non-activated cellulose desferrioxamine bandage took up only 4 mumol/g (3%).

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L169 ANSWER 5 OF 6 WPIX (C) 2003 THOMSON DERWENT
      1996-010700 [01]
                          WPIX
 DNN N1996-009247
                          DNC C1996-003355
      Medical polymer gel for wound dressing etc. - comprising water-swellable
 ΤI
      gel, spacer, enzyme-hydrolysable unit and active component.
 DC
      A96 B07 D22 P34
 ΙN
      KINOSHITA, H; TANIHARA, M
 PΑ
      (KURS) KURARAY CO LTD
 CYC
 PI
      WO 9531223
                    A1 19951123 (199601) * EN
                                                 62p
                                                        A61L015-01
         RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
          W: US
      JP 08024325
                    A 19960130 (199614)
                                                 21p
                                                        A61L025-00
      EP 712635
                    A1 19960522 (199625)
                                                 29p
                                                        A61L015-00
          R: DE FR GB IT
        5658592
5<del>7702</del>29
                    A 19970819 (199739)
                                                 21p
                                                        A61K009-10
                    A 19980623 (199832)
                                                        A61K009-10
      JP 2000070356 A
                       20000307 (200023)
                                                 20p
                                                        A61L024-00
      JP 3107726
                    B2 20001113 (200060)
                                                 21p
                                                        C08J003-075
     WO 9531223 A1 WO 1995-JP873 19950508; JP 08024325 A JP 1995-125838
ADT
      19950425; EP 712635 A1 EP 1995-917511 19950508, WO 1995-JP873 19950508; US
      5658592 A WO 1995-JP873 19950508, US 1996-571976 19960116; US 5770229 A
      Div ex WO 1995-JP873 19950508, Div ex US 1996-571976 19960116, US
      1997-826097 19970324; JP 2000070356 A Div ex JP 1995-125838 19950425, JP
      1999-269359 19950425; JP 3107726 B2 JP 1995-125838 19950425
FDT EP 712635 Al Based on WO 9531223; US 5658592 A Based on WO 9531223; US
     5770229 A Div ex US 5658592; JP 3107726 B2 Previous Publ. JP 08024325
PRAI JP 1994-124158
                       19940513
     DE 2627125; DE 3614095; EP 185070; EP 247362; JP 51149883; JP 565663; JP
     60130601; JP 61502310; JP 62254763; US 4152170; US 4226232; US 4716154
          A61K009-10; A61L015-00; A61L015-01; A61L024-00; A61L025-00;
IC
          C08J003-075
          A61K009-00; A61K047-30; A61K047-36; A61K047-48; A61L015-16;
          A61L027-00; C08B037-04; C08B037-08
AΒ
          9531223 A UPAB: 19960108
     A polymer gel for pharmaceutical use comprises a water-swellable polymer
     gel with a drug bonded to it of formula \overline{A}-X-Y-D (I). A = water-swellable
     polymer gel; X = \text{spacer}; Y = \text{a degradable gp.} with a main chain that can
     be broken by an enzyme; D = drug. Also claimed is a water-swellable
     polymer gel (A') comprising a polysaccharide contg. carboxy gps.,
     crosslinked by a cpd. of formula R1-NH-(CH2)n-NH-R2 (II) or its salt. R1,
     R2 = H \text{ or } COCH(NH2) - (CH2) 4 - NH2; n = 2-18.
          USE - The gel is used to cover wounds including cuts, burns and
     surgical wounds; as a protective cover (pseudo skin) for bed sores and
     ulcers; as an adhesive for living tissue; to reinforce bone; and as
     drug-release material. (A') is used as A in (I).
    ADVANTAGE - The gel A' is heat-resistant, transparent and
     biocompatible, with high safety. (I) promotes wound healing and may
     contain growth factors, metalloproteinase inhibitors,
     antibiotics, steroids, etc.
     Dwg.0/3
FS
     CPI GMPI
FA
     AB; DCN
MC
     CPI: A03-A00A; A08-D03; A12-S; A12-V01; A12-V03A; B04-C02D; B04-C02E;
          B12-M03; B14-N01; B14-N17; D09-C04B
ABEQ US
          5658592 A UPAB: 19970926
     A water swelling polymer gel produced by covalently crosslinking a
     polysaccharide having a carboxyl group within the molecule with a
     crosslinking reagent represented by the following general formula
     R1HN-(CH2)n-NHR2 (II) (wherein n is 2-18; and R1 and R2 independently
```

represent hydrogen atom or the group represented by -COCH(NH2)-(CH2)4-NH2) or a salt thereof, in which the crosslinking reagent is present in an amount 1-50 mole % with respect to the carboxyl group of the polysaccharide. Dwg.0/3

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L169 ANSWER 6 OF 6 WPIX (C) 2003 THOMSON DERWENT
     1994-036539 [05]
                        WPIX
DNC C1994-016777
     Compsns. for treating rheumatoid arthritis - contg. lipid-bound
     glycosaminoglycan..
DC
     B04
     AOKI, S; IWASAKI, S; KIMATA, K; SUGIURA, N; SUZUKI, S
IN
PΑ
     (SEGK) SEIKAGAKU KOGYO CO LTD
CYC
PT
     EP 581282
                   A1 19940202 (199405) * EN
                                               25p
                                                      A61K031-735
         R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
                   A 19940203 (199411)
     AU 9344314
                                                      A61K031-725
     JP 06072893
                   A 19940315 (199415)
                                               22p
                                                      A61K037-20
                   A 19940131 (199416)
     CA 2101482
                                                      A61K031-725
     US 5470578
                   A 19951128 (199602)
                                               18p
                                                      A61K037-22
     AU 668963
                   B 19960523 (199628)
                                                      A61K031-725
     EP 581282
                   B1 19990512 (199923) EN
                                                      A61K031-735
         R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
     DE 69324859
                  E 19990617 (199930)
                                                     A61K031-735
     EP 581282 A1 EP 1993-112169 19930729; AU 9344314 A AU 1993-44314 19930729;
ADT
     JP 06072893 A JP 1992-203558 19920730; CA 2101482 A CA 1993-2101482
     19930728; US 5470578 A US 1993-98936 19930729; AU 668963 B AU 1993-44314
     19930729; EP 581282 B1 EP 1993-112169 19930729; DE 69324859 E DE
     1993-624859 19930729, EP 1993-112169 19930729
     AU 668963 B Previous Publ. AU 9344314; DE 69324859 E Based on EP 581282
PRAI JP 1992-203558
                      19920730
     4. Jnl. Ref; EP 466966; EP 493622
     ICM A61K031-725; A61K031-735; A61K037-20; A61K037-22
          A61K009-48; A61K031-715; C07H005-06
           581282 A UPAB: 19940315
AΒ
       Antirheumatic compsns. comprise a lipid-bound glycosaminoglycan
     (I) opt. in salt form, and a carrier. (I) are described in JA4-80201 and
          (I) comprises chondroitin sulphate, dermatan sulphate or
```

hyaluronic acid bound to a glycerolipid, pref. a glycerophospholipid or glyceride, esp. phosphatidyl ethanolamine (PE) or phosphatidyl serine. (I) is prepd. by oxidising the reducing terminal of the glycosaminoglycan, lactonising the prod. and reacting the lactone with an NH2-contg. lipid to form an amide bond. Binding may also be via an aminoalkyl or ester bond. The compsns. are formulated as solns. for intra-articular injection.

ADVANTAGE - The compsns. inhibit adhesion of inflammatory synovial membrane cells to joint cartilage tissue, alleviate inflammation of the synovial membrane, and have no toxicity or side effects. Dwg.1/5

FS CPI

FA AB; DCN

MC CPI: B04-C02V; **B14-C06** 

ABEQ US 5470578 A UPAB: 19960115

A method of treating **rheumatism** which comprises administering to mammals suffering from **rheumatism** a composition comprising between 0.1 to 80% lipid-bound glycosaminoglycan (gag) or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier, wherein said composition is administered in a dose of 0.1 to 2,000 mg/adult once a day or within several weeks. Dwg.0/3

Jul

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(FILE 'HOME' ENTERED AT 15:52:25 ON 21 JAN 2003)
                 SET COST OFF
      FILE 'REGISTRY' ENTERED AT 15:52:46 ON 21 JAN 2003
               2 S HYALURONIC ACID/CN OR 9067-32-7
L1
             753 S ?HYALURON?/CNS NOT L1
L2
L3
             435 S L2 NOT SOL/FA
             318 S L2 NOT L3
L4
                 E CYCLOOXYGENASE/CN
L5
               1 S E8
               2 S E3, E7
                 E MATRIX METALLOPROTEASE/CN
              15 S E3, E5-E13, E15-E17, E23, E24
L7
               5 S E25, E36, E43, E45, E46
\Gamma8
               4 S E50, E51, E55, E58
L9
L10
               1 S E61
L11
               5 S E72, E75, E79-E81
L12
               4 S E85, E89-E91
L13
           1365 S (?METALLOPROTEINASE? OR ?METALLOPROTEASE?)/CNS
L14
                 STR
L15
              31 S L14 CSS
L16
            2264 S L14 FUL
                 SAV TEMP L16 FONDA700/A
             629 S L14 CSS FUL SUB=L16
1.17
                 SAV L17 FONDA700A/A
     FILE 'HCAPLUS' ENTERED AT 16:16:23 ON 21 JAN 2003
L18
          10031 S L1
L19
           3440 S L3
L20
            151 S L4
          14614 S HYALURONIC ACID OR HYALURONATE OR HYALURONAN
L21
L22
          20161 S ?HYALURON?
L23
          20696 S L18-L22
L24
           1922 S L5
L25
           9113 S L6
          13384 S (COX OR CYCLOOXYGENASE OR CYCLO OXYGENASE) (L) 2 OR COX2
L26.
L27
             13 S PROSTAGLANDIN(L) (ENDOPEROXIDASE OR ENDO PEROXIDASE) (L) (SYNTHA
L28
              41 S L23 AND L24-L27
L29
          26594 S L7-L13
L30
             476 S L23 AND L29
L31
            309 S L17
L32
               4 S L23 AND L31
     FILE 'REGISTRY' ENTERED AT 16:21:16 ON 21 JAN 2003
L33
           1635 S L16 NOT L17
     FILE 'HCAPLUS' ENTERED AT 16:21:22 ON 21 JAN 2003
L34
              3 S L33 AND L23
T.35
              45 S L28, L32, L34
                E ANTIRHEUMAT/CT
                E E5+ALL
L36
           4437 S E5, E4+NT
             48 S L23 AND L36
L37
L38
             91 S L35, L37
             77 S L23 AND (ANTIRHEUMAT? OR ANTI RHEUMAT?)
L39
            136 S L38, L39
L40
L41
              6 S L40 AND ?CONJUGAT?
                E TAMURA T/AU
L42
            596 S E3-E5
                E TAMURA TATSUYA/AU
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L43
               57 S E3
                  E OKAMACHI A/AU
 L44
               15 S E3, E4
                  E CHUGAI/PA,CS
             3920 S E1-E4
 L45
                  E SEIYAKU/PA, CS
           15106 S E1-E6
 L46
                  E KABUSHIKI/PA, CS
 L47
                1 S E10E4
                  E KAISHA/PA,CS
           14062 S E2-E4
 L48
                 E KABUSHIKI/PA, CS
 L49
            8315 S E1-E4
 L50
                3 S L40 AND L42-L49
                 E W099-JP2600/AP, PRN
 L51
                1 S E3, E4
                  E JP98-138329/AP, PRN
 L52
               1 S E4
                 E JP98-224187/AP, PRN
 L53
               1 S E4
                 E JP99-43064/AP, PRN
L54
               1 S E4
L55
               0 S L40 AND L51-L54
               1 S L51-L54 AND L42-L49
L56
      FILE 'REGISTRY' ENTERED AT 16:28:57 ON 21 JAN 2003
L57
               1 S 9001-92-7
      FILE 'HCAPLUS' ENTERED AT 16:29:06 ON 21 JAN 2003
L58
           34671 S L57
L59
          135094 S ?PROTEASE? OR ?PROTEINASE?
L60
             972 S L23 AND L58, L59
               8 S L60 AND L42-L49
L61
                 SEL DN AN 1-3
L62
               3 S L61 AND E1-E9
L63
               4 S L50, L56, L62 AND L18-L32, L34-L56, L58-L62
L64
             117 S L23 AND L59 (L) ?MATRIX? (L) ?METALLO?
L65
             246 S L40, L64
L66
               4 S L56, L63
                 E JOINT/CT
                 E E5+ALL
L67
            1229 S E2
                 E JOINT/CT
L68
            3685 S E7-E28
                 E E6+ALL
L69
            8769 S E6, E5+NT
                 E E13+ALL
            2565 S E2
L70
L71
              25 S L65 AND L67-L70
                 E CARTILAGE/CT
L72
              13 S L65 AND E4-E20
                 E E3+ALL
L73
              38 S L65 AND E7+NT
                E RHEUMATISM/CT
                E E3+ALL
                E E2+ALL
L74
              48 S L65 AND E4, E5, E3+NT
L75
             77 S L71-L74
L76
            170 S L40, L75
           3545 S (L1 OR L3 OR L4) (L) (THU OR USES OR BUU OR BAC OR DMA OR PAC O
L77
L78
             45 S L76 AND L77
L79
             43 S L78 NOT L66
L80
             79 S L76 AND (1 OR 63)/SC,SX
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L81
              76 S L80 NOT L66
 L82
              84 S L79, L81
              53 S L82 AND (?CONJUGAT? OR SYNERG? OR BIND? OR BOUND? OR REACT? O
 L83
 L84
              19 S L83 AND L29
 L85
              21 S L83 AND L58, L59
                 SEL DN AN 8 18
 L86
               2 S E1-E6
              27 S L83 NOT L84, L85, L86, L66
 L87
                 SEL DN AN 8 15 18
 L88
               3 S E7-E15
 L89
              31 S L82 NOT L83-L88
                 SEL DN AN 11 12
 L90
               2 S E16-E21
 L91
              11 S L66, L86, L88, L90
 L92
           12795 S L18-L20
 L93
              25 S L92 AND L24, L25
 L94
             580 S L92 AND L29, L58
 L95
               3 S L92 AND L31
 L96
               3 S L92 AND L33
 L97
               3 S L95, L96
 L98
               1 S L97 AND L91
L99
              11 S L91, L98
L100
              35 S L94 AND L36, L67-70
L101
              40 S L94 AND L76
L102
              59 S L100, L101
L103
              31 S L102 NOT L82-L91, L99
                 SEL DN AN 12
T.104
               1 S L103 AND E22-E24
L105
              12 S L99, L104 AND L18-L32, L34-L56, L58-104
                 SEL HIT RN
     FILE 'REGISTRY' ENTERED AT 17:11:11 ON 21 JAN 2003
L106
             19 S E25-E43
     FILE 'HCAPLUS' ENTERED AT 17:11:28 ON 21 JAN 2003
                SEL RN L66
     FILE 'REGISTRY' ENTERED AT 17:12:01 ON 21 JAN 2003
L107
             36 S E44-E79
             23 S L107 NOT L106
L108
L109
              1 S L108 AND C39H59N5O11
     FILE 'HCAPLUS' ENTERED AT 17:13:17 ON 21 JAN 2003
L110
              1 S L109
L111
             12 S L110, L105
     FILE 'REGISTRY' ENTERED AT 17:13:39 ON 21 JAN 2003
     FILE 'HCAPLUS' ENTERED AT 17:13:54 ON 21 JAN 2003
     FILE 'REGISTRY' ENTERED AT 17:14:09 ON 21 JAN 2003
L112
             20 S L106, L109
     FILE 'EMBASE' ENTERED AT 17:14:37 ON 21 JAN 2003
L113
           7430 S L1
L114
          10527 S L3
L115
              0 S L4
L116
           9891 S L21
L117
          13801 S L22
L118
          13801 S L113-L117
                E ANTIRHEUMATIC AGENT/CT
L119
            555 S E3+NT AND L118
L120
              1 S E3(L)CB/CT AND L119
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L121
              13 S L118(L)CB/CT AND L119
                  SEL DN AN 6 7 9 10 12 13
 L122
                6 S L121 AND E1-E12
 L123
                7 S L120, L122
                  E CYCLOOXYGENASE/CT
 L124
             5725 S E46+NT
 L125
               62 S L118 AND L124
 L126
                1 S L124(L)CB/CT AND L125
 L127
                0 S L118(L)CB/CT AND L125
 L128
                8 S L123, L126
                 E MATRIX METALLOPROTEASE/CN
 L129
               0 S E4 AND L118
                 E METALLOPROTEASE/CN
                 E METALLOPROTIENASE/CT
                 E MATRIX METALLOPROTEASE/CT
 L130
              62 S E71+NT AND L118
               0 S E71(L)CB/CT AND L130
 L131
               0 S L118(L)CB/CT AND L130
 L132
 L133
               8 S L128 AND L113-L132
      FILE 'EMBASE' ENTERED AT 17:23:24 ON 21 JAN 2003
                 E ANTIRHEUMATIC AGENT+ALL/CT
                 E ANTIRHEUMATIC AGENT+ALL/CT
      FILE 'WPIX' ENTERED AT 17:24:16 ON 21 JAN 2003
                 E W099-JP2600/AP, PRN
L134
               1 S E3
                 E JP98-138329/AP, PRN
L135
               1 S E4
                 E JP98-224187/AP, PRN
L136
               1 S E4
                 E JP99-43064/AP, PRN
L137
               1 S E4
L138
               1 S L134-L137
                 E R03231+ALL/DCN
L139
            1127 S E1
                 E R06437+ALL/DCN
L140
             640 S E1
L141
           1297 S C08B037-08/IC, ICM, ICS
L142
           2330 S L21
           2427 S L21/BIX
L143
           2832 S L22/BIX
L144
L145
           4071 S L139-L144
                 E OKAMACHI A/AU
L146
               6 S E3
                E TAMURA T/AU
L147
             604 S E3-E7
              3 S L146, L147 AND L145
L148
L149
              3 S L138, L148
            134 S A61K031-728/IC, ICM, ICS
L150
L151
           4085 S L145, L150
L152
              3 S L146, L147 AND L151
L153
              3 S L149, L152
L154
             26 S L151 AND ?MATRIX?(L)(?PROTEASE? OR ?PROTEINASE?)(L)?METALLO?
L155
             18 S L154 AND INHIBIT?
L156
             22 S L151 AND (?METALLOPROTEASE? OR ?METALLOPROTEINASE?) (L) INHIBIT
L157
             24 S L155, L156
                SEL DN AN 6 11 17 19 21 23 24
L158
              7 S L157 AND E1-E17
L159
              9 S L153, L158
L160
             12 S L151 AND L26, L27
L161
            117 S L151 AND ?RHEUMAT?
L162
             26 S L151 AND (B12-D09 OR C12-D09 OR B14-C06 OR C14-C06)/MC
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L163 L164 L165	21 S L161 AND L162 26 S L162, L163
L166	12 S L164 AND M782/M0, M1, M2, M3, M4, M5, M6
F100	14 S L164 NOT L165 SEL DN AN 1 7 9 12
L167	4 S L166 AND E18-E25
L168	11 S L159,L167 AND L134-L167 SEL DN AN 1-3 8 9 10
L169	6 S L168 AND E26-E39

FILE 'WPIX' ENTERED AT 17:47:25 ON 21 JAN 2003